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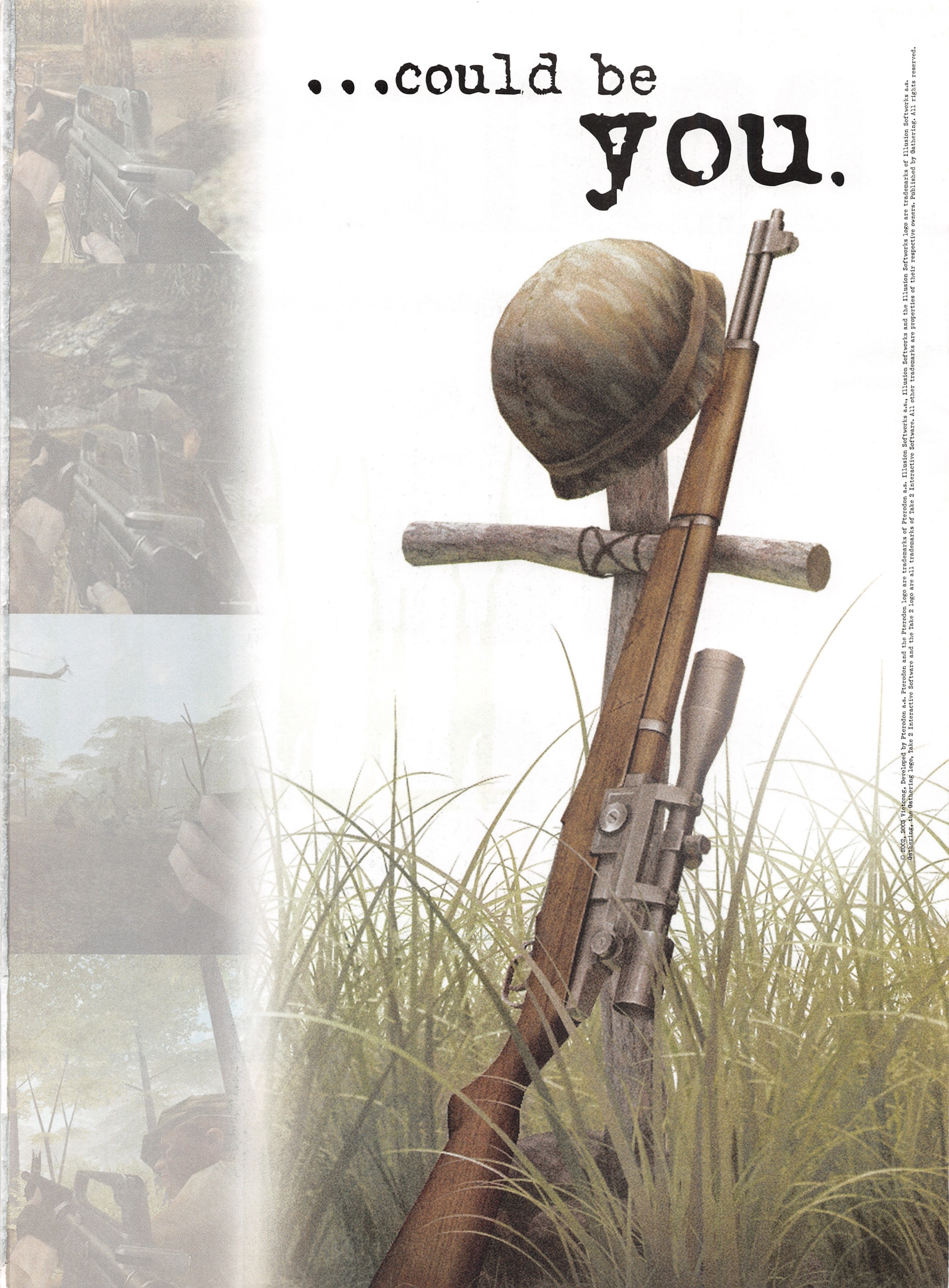
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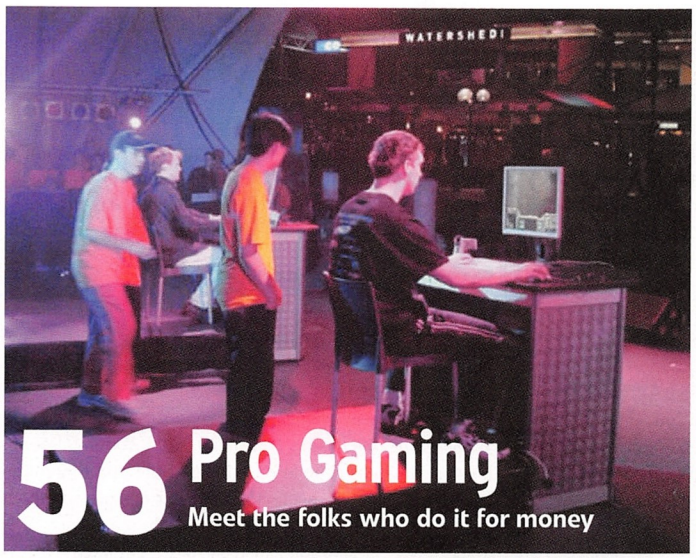
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ADVANCING BACKWARDS



We are not living in the Golden Age of PC gaming. Over the past few months I've become increasingly alarmed at the state of game development for PC - publishers are concentrating on the new consoles, technological innovation dominates at the expense of everything else, and the late-nineties flood of PC games has slowed to a trickle.

For me, the real Golden Age of PC gaming predated this magazine. Starting in 1993 with the Australian release of Dune 2 and advancing quickly to the original Quake and Duke Nukem 3D in 1996, every title that appeared on the shelf seemed an innovation.

PC PowerPlay was launched in response to this Golden Age. The first three years of the magazine, 1996 - 1999, saw as many as 40 games reviewed per issue, from stalwarts such as the Mechwarrior series, to fondly remembered Lucasarts adventures like Full Throttle and Sam & Max. Toward the end of that time, sure the flood had begun to plateau, if I may mix metaphors, but there were still dozens of excellent games to choose from.

Out of touch and out of puff

With the turn of the millennium, the volume of new titles each month began to drop away but the quality remained high; we began to move into the heady summer of the RPG, with Baldur's Gate, Fallout 2, Planescape Torment and more. And then there was Deus Ex, that for a while there looked poised to get the big red ball of innovation rolling again.

But then, it all fell apart. After seven years of great games, new experiences and a sense of hope for the future, PC gaming has turned all but stagnant. Last year in particular was a weak year indeed for PC, a year in which the most celebrated game, Warcraft 3, was celebrated precisely because it offered a true-to-form RTS experience and its new elements were solid and non-confronting. Most serious PC gamers stuck with multiplayer games released several years ago - Counter-Strike, Quake 3 and Starcraft dominated the LANs while the World Cyber Games simply updated its schedule to include the latest version of FIFA.

Blame Big Graphics

This is all nVIDIA's fault. Or rather, in the interests of a more rounded argument, it's the fault of all technology companies and the developers they wine, dine and seduce into designing their next blockbuster game to support new graphical features and thus drive sales of the latest generation of videocard, motherboard or CPU.

If you think about it, nVIDIA is almost exclusively supported by gamers. Business and casual home users have no need for a GeForce4 Ti4600, these thousand dollar videocards are designed for and marketed specifically toward gamers.

So with companies like nVIDIA dependent entirely on gamers, and what's more, on a gamer's willingness to spend $1000 every six to ten months on a new card, the business plan of this giant has directly helped to shift game development focus away from new gameplay models and experiences and toward flashier graphics.

A perfect case in point is Unreal 2. Its antiseptic graphical shine seemed to dull very, very quickly in sharp relief to its frankly pig-ordinary gameplay. Somehow, despite having had years to work on it, unprecedented access to nVIDIA's new technology and a proven track record in development, the combined talents of Epic and Legend (who created, among other things, the awesome Frederick Pohl's Gateway adventure game of the early nineties) failed to produce a standard shooter that was even as entertaining as Doom.

Doomed to mediocrity

Like American McGee's Alice before it, Unreal 2 suffers from level design that focuses entirely on visual flair and not at all on how the level flows and works. Doom's true genius was not its pseudo-3D engine, but superb level design that gave the illusion of a non-linear experience. While there was always a perfect route through a Doom level, it was never the only route, and the proliferation of secret areas - and once per episode, a secret exit to a whole bonus level - made each level memorable, a classic of PC gameplay.



An extension of the problem is that increasingly photo-realistic (or movie-quality) graphics have given rise to a movie storytelling mentality that has plagued PC gaming - mostly FPS but some other genres too - for the past eighteen months. Suddenly, terrified of level-based episodic gameplay, developers obsess over creating a flowing, uninterrupted narrative, free of such gauche 'old school' elements as scores, time checks and item collection percentages.

Black mesa syndrome

Part of the blame for this goes to Half-Life, which managed to create a flowing story but still feel like a game. But most of these other developers couldn't write a story to save their lives. Half-Life was an original, if heavily B-grade horror flavoured, survival piece. Unreal 2 is like something the weird guys at the back of the class used to submit in Year 8 English, and it's much more typical of the form.

In any case, what the hell is wrong with having a game split into levels with each level given a par time to beat? It's the simplest way in the world of creating replayability - beat your own score, beat your mates' score, become elite, post crazy demos of yourself doing it on the Internet. Anyone remember Quake Done Quick? Now that was gaming.

To my mind, PC gaming was better before the GeForce3. PC gaming was better when developers didn't focus on storytelling but instead focused on player experience and longevity. PC gaming was better when every new AAA title offered a significantly different experience, and when the word 'genre' actually had some kind of meaning. Hopefully, if we make enough fuss, someday PC gaming will be like that again.



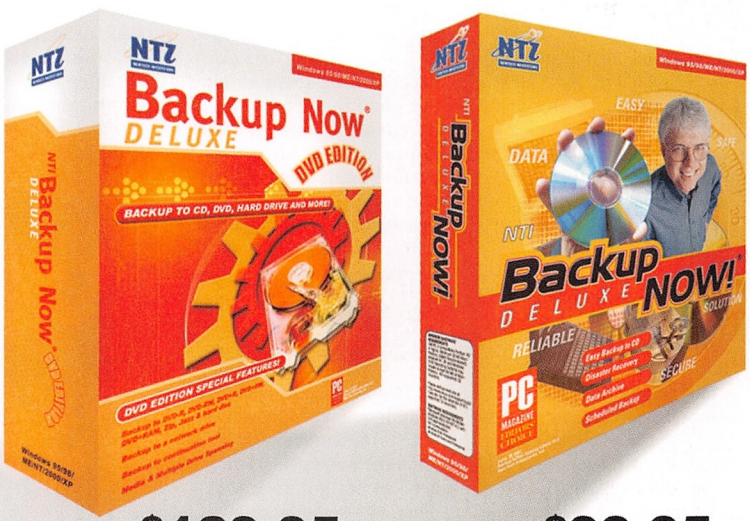
Anthony Fordham
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"...I found that the guy had wiped my original HDD with my system on it!"

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"...because you never know what's going to happen."

Ben Breece, PC Powerplay, Feb 03



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Check out the letters section of PC Powerplay Issue #83, page 10.

Poor Ben Breese lost everything because he didn't backup!

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For Warcraft 3 Collectors Edition? Yes please!

Says Chinese aren't pirates

Your response to Jack in PCPP#84 about the pirated games in China was a little wrong - it's completely possible to buy legit software in Asia, and as Jack said, it's DEAD CHEAP - most new games only cost around AU$25. This includes box, printed manual (translated into the local language, warranty and working online CD-key; exactly as you would get here, except with a 'not for sale outside this country' sticker). You can email any publisher, and they'll tell you that these boxes are completely legal. The answer to Jack's question 'why are legit games in Australia so expensive in comparison' has more to do with the fact that doing everything over here costs more - packaging, retailing, labour, plus over there they actually have to compete with the pirate market.

Glen

Thanks Glen. Further research reveals he is of course right; if you want cheap software head to Thailand or similar, but be aware that you're only supposed to use it in those countries and in some cases you may have to tell your computer that you're in Bangkok before it will let you run the application. However, this situation simply once again highlights the ridiculous Catch-22 situation in Australia and the US in regard to game pricing. Piracy and wanton profiteering keeps prices high and sell-through low. Conversely, if prices are dropped, sell-through may not pick up enough to cover the ridiculous costs of production. Ditch the middle-management I say, and tell those programmers to work for realistic wages. Damnit.

Worried about ports

The worst thing facing the PC gaming scene at the moment is console ports. Poorly implemented for PC, but good games (for the most part) with some original ideas, they are slowly infiltrating our game markets everywhere. Is it possible that in the future, we will become the minority as far as game development goes? Anthony Fordham in PCPP#84 says that console games are outselling PC games, and that's probably because people are sick of seeing re-iterations of Quake and are turning to something different and original. This is BAD, and its an indication of our future. Will we have to play ports when we want to play something other than a sequel? Will all the big new ideas come from PS2 or Xbox studios? Even the big guys like Blizzard are turning console. It seems that the 'blockbuster' titles like the C&C or Quake series are the only thing that sells and sets records. And maybe now its just all about the money for big developers. Perhaps, in

LETTER OF THE MONTH: Sister thinks all gamers are losers

My sister was going on about that games are made and targeted at people with low self esteem because she'd done it in English at school last year. Do you think this is true? I showed her ads for games in PCPP#80 and PCPP#84 and she reckons that most of them target people with low self esteem. What the hell would she know she is one of those internet chat freaks. I just thought I would tell you.

Chris James

You'd be surprised how much of our feedback here at PCPP comes from people's sisters. Basically it seems to me that your sister thinks we're all a pack of losers because we like to pretend to strap on big guns and blow the crap out of innocent alien hellbeasts from the nth dimension. But are gaming advertisers actively targeting people who feel bitter and frustrated at the world and down on the themselves, in the hope that they will buy the game so they can take out their inadequacies on virtual enemies? In all honesty, at times it seems that games advertisers hardly know what their proper market is and simply copy the kinds of ads you see for big-budget Hollywood explosion-fests such as Arnie's recent pile of excrement, Collateral Damage. There's very little of the clever psychology employed by the advertisers of credit cards, soft drinks and cut-price women's jeans. They're just ads that look slick and hopefully exciting enough to encourage someone to buy the game. As to the question of low self-esteem, I think anyone who's spent any time on a Q3A or CS server will realise that many of the players on there could do with a good dose of low self-esteem in order to stop them being so insufferably smug when they run into the middle of a big tangle of players and manage to get one or two gauntlet kills. Humiliation my... (ahem) eye.



This must be an in-joke...



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the future, we will either have a few very polished games that graphically are great, but aren't original. Or on the other hand, if we want something different, will we have to turn to poorly written ports because all the smaller PC developers are going out of business? All I can say is that I hope we can eventually put our sequels behind us and start something new. Because if we don't, we may find that we've lost all the originality that made PC games fun in the first place.

Darksaber

These are real concerns and the main reason I lie awake at night - apart from that still-unresolved legal business with the petunias. However, Inform, the main chart trackers for the video entertainment industry, reassure us that this current slump in PC performance is purely seasonal and once everyone has drunk their fill of console goodness, they will return to PC. But we're not so sure, and won't feel completely comfortable again until once more we can rely on being able to review more than 20 games an issue, every issue. Where have all the games gone?

Blames system requirements

I also fail to share Inform's optimism for a revival, this is more than just a temporary drop that will naturally right itself. Having been a long time console advocate I finally made the switch to PC gaming after my PSX gave up the ghost at the same time I was in the market for a new pooter. But it wasn't long before I was confronted with the usual P.C gaming question; will game X run on my machine ? PC developers are subjecting themselves to a death of a thousand cuts every time a game like UT2003 and BF1942 hits the shelves. How many 'average' computer users can run these games, even at low settings? While its long been a boast from PCPP that today's PC's easily out perform the consoles, you rarely acknowledge how much such a machine costs! I can buy three consoles and have change for a game or two for the same price as an ATI Radeon 9700! Lets face it, most computers actually in the home today are no more powerful than an Xbox, and when little Johnny down the street buys a game for his console he's guaranteed that it will work, and mum and dad don't mind forking out $300 odd for something that's going to provide 4-5 years entertainment rather than taking a huge gamble on $3000 and a PC that could be a paperweight in two years. And forget online play saving the day, dial-up is still the king in this country and unfortunately will be for some time to come. I've grown to love PC gaming and it kills me to see the PC game section of my local EB and Harvey Norman looking like a poor cousin to the mega aisles of the consoles, but advertising is only a part of the problem, minimum system requirements is the real killer.

Davo

Well that pretty much covers it I think. About the only point Davo hasn't made is that developers need to continue to focus on keeping PC games complex and in-depth, since consoles cannot at this stage command the kind of attention and investment of time and brain power that games such as Sim City 4 and Everquest require. That's the PC's speciality, not flashy graphics. Complicated, detailed games that take months to finish. So now the only question is: why do we keep getting so much finished-in-10-hours crap?



What do you mean "Expanded Memory Not Detected?"

Questions our standards

After whinging about PS2 beating out PC, is it really right to then have almost every 5th page in the magazine covered in an ad for Playstation or Xbox games?

Big Big Jim

Sigh. If only every 5th page in the mag WAS an ad, why then... it'd be a much longer magazine. Seriously though, can we help it if advertisers are releasing - particularly their licensed titles - on all platforms simultaneously to maximise raw, blistering profits? Nothing major is PC-only anymore it seems, and I guess we have the Xbox to thank for that. Truly, this is the winter of our discontent.



FROM THE FORUMS: C&C release sparks RTS dialogue

With the release of C&C Generals this month, the usual suspects on the PCPP forums examined the issue of RTS. Does this genre have a future? Almost definitely. Will it ever again show the innovation of its youth? Not so sure. Join the debate at www.pcpowerplay.com.au/forums where they ask: What would you like to see in the RTSs of the future? www.pcpowerplay.com.au/forums

Posted: Feb/22/2003 10:29pm
More original spins on the genre that move it from the norm:
...in obvious ways as was done by Shiny in Sacrifice when they made the commander an actual unit on the battle field that you controlled from a third person viewpoint. Or as was done in Hostile Waters where you were able to take control of individual units and pilot them through a first person viewpoint.
...in subtle ways as was so masterfully shown with Battle Realms which took traditional RTS mechanics and reworked them to shift the focus from micro to macro management, bringing a truly refreshing change to the way the games are played. Or as with the Total War series which brought us huge armies to play with and gave us the ability to use large overall battle formations and put into play REAL war tactics as espoused by great military thinkers like Sun Tzu.
ElPresidente, Moderator

Posted: Feb/23/2003 5:52pm
Perimeter is the future! The story leaves no sci-fi admirer indifferent and the gamer participates in a large-scale expedition covering several centuries in mysterious Pshychosphere worlds.
Perimeter does not copy other RTS products but instead offers a well-balanced combination of new terraforming principles and territorial wars with traditional strategy elements.
So people don't be indifferent, buy Perimeter Q2 2003! The developers need money for more Vodka. Supposedly you will be able to modify your troops on the fly to suit the various terraformed surrounding they encounter without them going back to base or being replaced with newer units.
Anonymous

Posted: Feb/23/2003 10:40pm
No rushing! Something like Age of Empires in terms of speed, so you can actually HAVE SOME FUN, and not have to click all over the map trying to keep track of every single thing happening on your team, e.g. Blizzard
Ram_Booster, Monkey

Posted: Feb/24/2003 12:48am
I can think of two directions it should and hopefully will go.
One is to make it more personal, a la being on the ground with the men giving orders. Think Band of Brothers and that's pretty much what I mean.
The other direction is the complete opposite. Ordering around huge forces, with smaller AI sergeants and what have you doing the small orders and such (like Conquest but giving them more control). Something with thousands or millions of troops invading a planet. A Warhammer 40k game like that would be cool. However it would be probably best if this was combined with Turn Based Strategy.
Wile.E, Tiefling

Posted: Feb/24/2003 9:18am
I think people will start to copy the Total War formula, and I know I'd love to see a Second World War: Total War game with foot soldiers, tanks, snipers (similar to the ninjas in Shogun), battleships, bombers, planes and the like - imagine the possibilities. Do you remember that map-mode in Shogun? That would work extremely well in a WWII game, don't you think? The good old Homeworld formula will also be used a fair bit - hopefully some bright spark developer will get to work on a Star Wars game instead of leaving it to mod developers.
Worms, Moderator

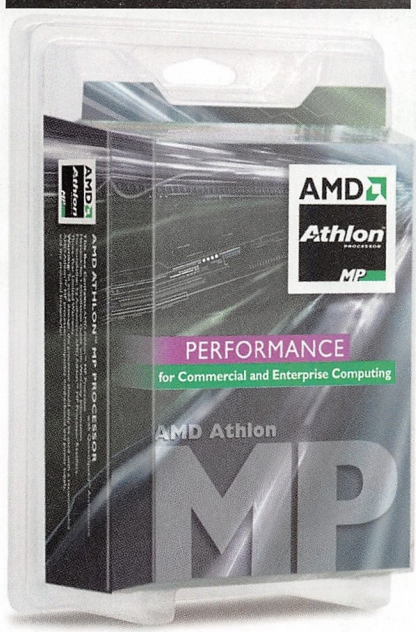
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Four Horsemen of the Apocalypse

Developer: 3DO ■ **Publisher:** 3DO ■ **Distributor:** Take2 ■ **Due:** Q3 2003

When too much misappropriated Biblical imagery is barely enough



Demonic imagery is subtle, more hinted-at than explicit

The Four Horsemen of the Apocalypse (FHOA) is to be another cleverly marketed action-adventure title from the people who brought you Heroes of Might and Magic. The story is roughly based on elements from Revelation, the final book of the Bible, and the final battle between Good and Evil. Herein four riders, each symbolising one particular sort of Very Bad Things and its relevance to life on earth, are sent down by God to punish mankind for its arrogance, or something like that.

The game has its own set of evil archetypes, incarnated into genuine virtual villains, to be conquered. Despite their slightly modernised personas they do a pretty good job at symbolising the ample range of trials facing Mankind at The End: War, Death, Famine and Pestilence.





Perspective of horror

From a third person perspective the player will take control of Abaddon, a fallen archangel set out to stop the insanity, and combat a rampaging cast of possessed zealots and demons (presumably with the ultimate aim of saving the world). There will, however be a small band of assorted human characters to lend him their unique and useful skills along the way.

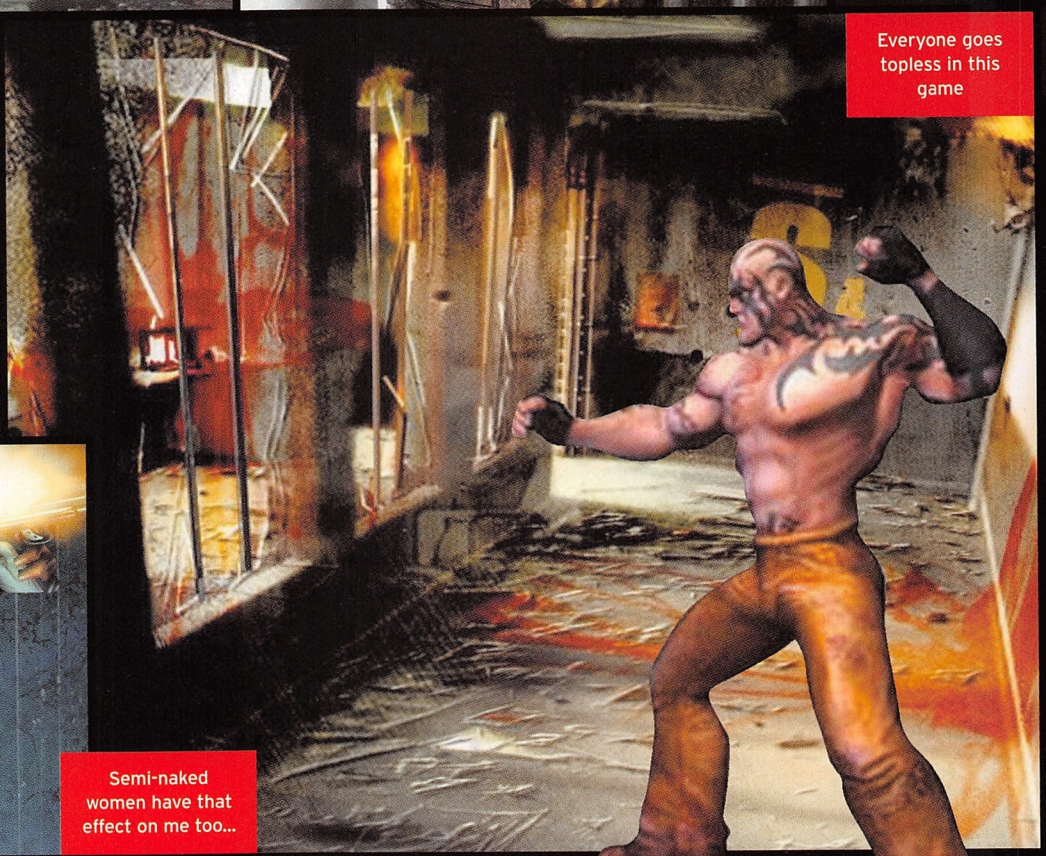
These three regular folks known as "God's chosen" need to be sought out, press-ganged and dragged along on the quest. Each character has a hidden talent that could prove crucial when encountering the traumas ahead. For added earthly realism, they are not only infallible and creations of pink mortal flesh, but have made healthy career choices; namely prostitute, serial killer and corrupt politician!

The gamplay seems tofocus on a small amounts of strategy and the





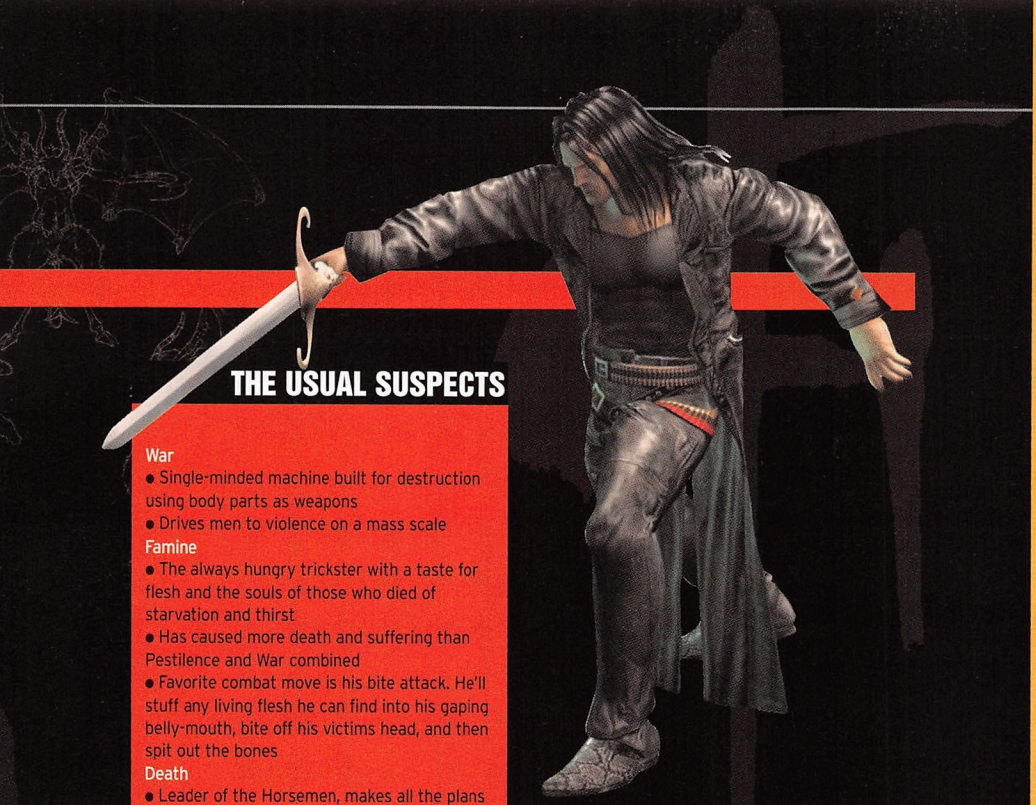
Semi-naked women have that effect on me too...



Everyone goes topless in this game

Why FHOA deserves a second look

- Mature content including brief nudity!
- Re-live the Matrix combat experience with stunning finishing moves!
- Comic book designers promise cutting-edge visuals with a unique style
- Pestilence is a woman with huge breasts. Of course!



THE USUAL SUSPECTS

War
- Single-minded machine built for destruction using body parts as weapons
- Drives men to violence on a mass scale

Famine
- The always hungry trickster with a taste for flesh and the souls of those who died of starvation and thirst
- Has caused more death and suffering than Pestilence and War combined
- Favorite combat move is his bite attack. He'll stuff any living flesh he can find into his gaping belly-mouth, bite off his victims head, and then spit out the bones

Death
- Leader of the Horsemen, makes all the plans
- Communicates telepathically with the other Horsemen
- Kills mortals with any manner of death
- Has no bias towards good or bad, only considers the body count

Pestilence
- Possesses indescribable beauty (Mmn, ironic - Ed)
- Once touched or angered, her beauty dissolves, revealing a rotting corpse, festering with disease and crawling with maggots
- Her decomposing flesh unleashes a virulent pandemic, capable of killing millions overnight

healthy gaming staples of exploration and combat to fill it out. Of course, while dispatching the array of demons and other creatures, appropriate and varied weapons can be chosen to suit the nature of The Beast. The combat system even comes with Mortal Kombat style finishing moves triggered by the player. On the other hand, we have yet to learn the quality of the three 'human' AI sidekicks in battle. Hopefully, they'll live up to their chosen societal roles.

Gory graphics

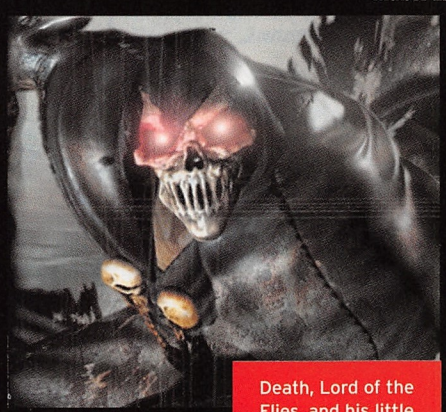
The visual potential must be the most anticipated and highly regarded aspect of this game. The creative team includes award-winning comic book artists Simon Bisley and Dave DeVries as well as Matrix-grade motion-capture people, SmashCut Inc. We have been promised GeForce4-taxing effects including flowing hair and cloth for all characters and paint-to-texture mapping to ensure that the final graphics look as much as possible like the original character art work. However, Plenty of the graphical content is unsuitable for the weak-hearted, as dismemberment and realistic exit wounds through objects and people features as part of the extreme and gory depictions of carnage and destruction that promises to run rampant in the game.

High quality cut-scenes will be spliced into all 18 levels. These might just be the cinematic experience needed to help carry some Armageddon's unwholesome and tragic atmosphere. Michael Mendheim, Vice President and Creative Director of 3DO, has described the game as "Not your father's video game... it's more like the Matrix meets Hellraiser".

In the US, FHOA has been rated M(17+) due to the other well-known Awesome Foursome: adult themes, nudity, violence and a good blood bath. Just when you thought Hollywood wasn't enough.

Mabel Li







Death, Lord of the Flies, and his little brother, below



Enclave

Developer: Starbreeze ■ **Publisher:** Vivendi ■ **Distributor:** Vivendi ■ **Due:** Q3 2003

Something old, something new, and a lot borrowed...

Previously available on Xbox only, Enclave oozes with extravagant graphic detail and an array of highly playable characters. With a time-proven story line and consistent gameplay, the game is sure to guarantee itself a place amongst highly evolved action/adventure shooter titles. Sadly, it will probably not take an Oscar for the most original game.

Enclave borrows heavily from other titles of similar genres both in playing style and battle system. Its style can be compared to the likes of Baldurs Gate, Rune and Diablo, and its FPS elements bear an uncanny resemblance to Counter Strike. All of these similarities correspond to the familiar optional first and third person views, a dozen specialised warriors, some RPG elements and a lot of busy first-person violent encounters.

Good ol' Good vs Evil

This epic saga takes place in a fantasy medieval world, where an age old war between Light and Dark forces is at last ended by a wizard who casts a spell and creates a great circular chasm in Earth. Inside this protective rift is The Enclave, where the good folk of Celenheim reside, leaving the undesirable Dark-siders to live outside and finally be known as the Outlanders. As time heals Earth's wound, the rift begins to close and poses a risk to The Kingdom of Celenheim inside the Enclave. They are also faced with the renewed threat of invasion from the banished Outlanders, who after years in exile have gathered strength and a taste for retribution.

There are two campaigns to choose from. You can either lead the Light side, fighting for the people of Celenheim in their resistance and ultimate salvation; or you can back the Dark forces in their quest to reclaim territory and domination. There are 27 levels that are divided between the campaigns, and 6 playable characters to choose from for each side each. Weapons, treasure and angry Orcs are dispensed generously.

This all sounds too familiar you say? But wait, the game does actually have a few original merits.

Big and Beautiful and Deadly

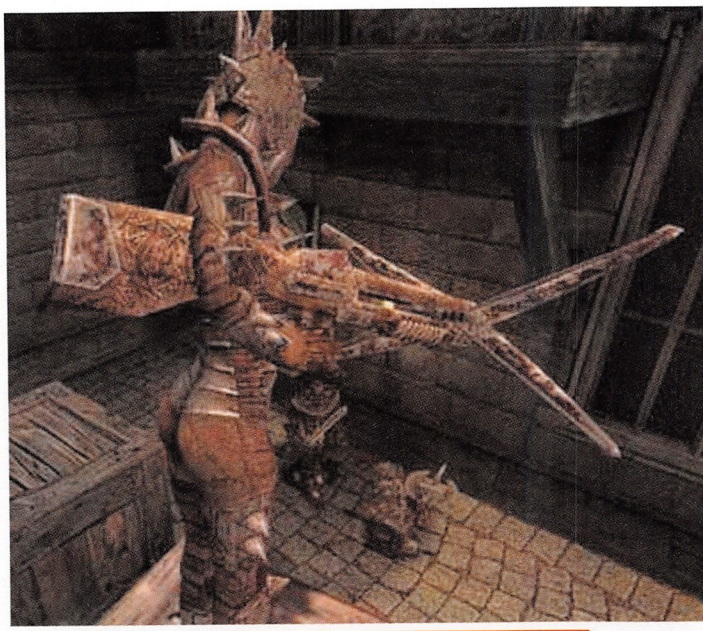
Thanks to those fastidious, and oh-so tidy Swedish developers, the game sports a plethora of finely crafted visuals. Special attention has been given to achieving a delicate balance in its mip-mapping parameters to maintain reliable detail at any distance and a "never before seen" light and shadow effects. The memory cost on your hardware? To experience all this visual grandeur, prepare to happily sacrifice 2.5 Gb of hard disk space.

The rich graphic beauty may sufficiently dumbfound even the most seasoned player and can distract you away from a deadly environment full of triggerable traps, tumbling crates, treacherous boulders and ill-timed collapses.

Troubled Past

Enclave's previously flawed AI battle performance and jumpy rendering non-linearities on Xbox have since been substantially ironed out with this PC version. Latest tests show that collision detection algorithms are still not quite up to mil spec and you may occasionally find yourself adapting to strange laws of physics in the game.

On a positive note however, unlike the original port, your games can be saved mid-level provided you have the gold pieces to keep your checkpoints on all the maps. As usual with these games, money will buy you out of a lot of frustration at the keyboard.





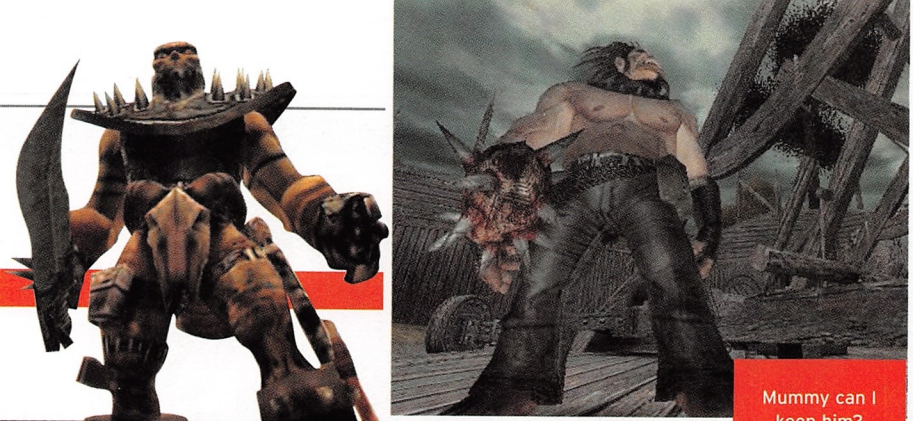
Let me guess - you've cut your hair?



This was my kindergarten, until it fell down

Why Enclave Deserves a Second Look:

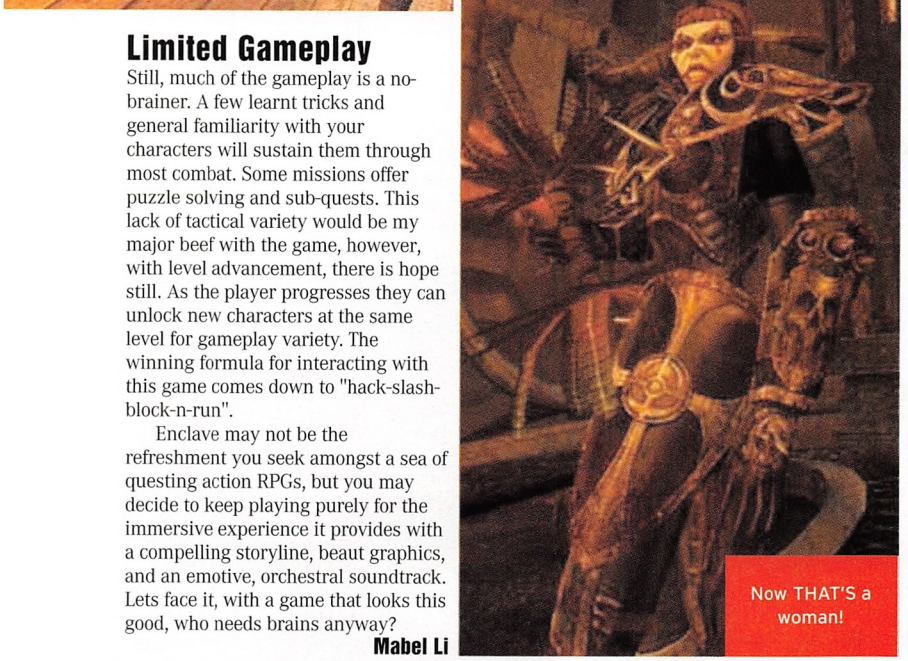
Enough levels to last through the autumn blues	Improved graphics which look even better on PC	Magnificent soundtrack and enticing sound effects	The vicissitude to play either Good or Evil



Mummy can I keep him?







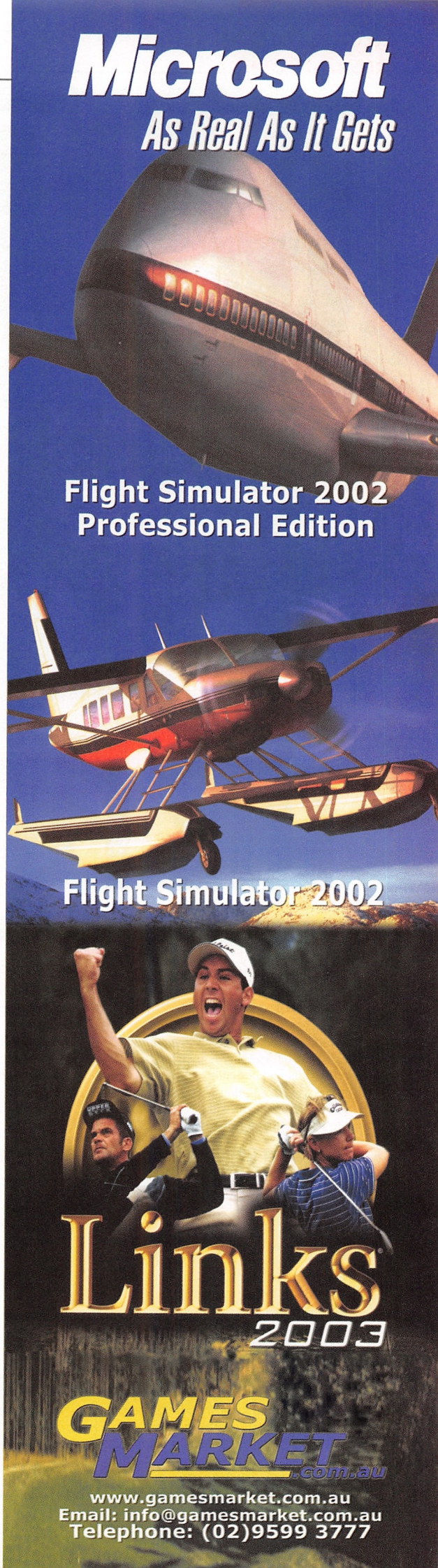
Now THAT'S a woman!

Limited Gameplay

Still, much of the gameplay is a no-brainer. A few learnt tricks and general familiarity with your characters will sustain them through most combat. Some missions offer puzzle solving and sub-quests. This lack of tactical variety would be my major beef with the game, however, with level advancement, there is hope still. As the player progresses they can unlock new characters at the same level for gameplay variety. The winning formula for interacting with this game comes down to "hack-slash-block-n-run".

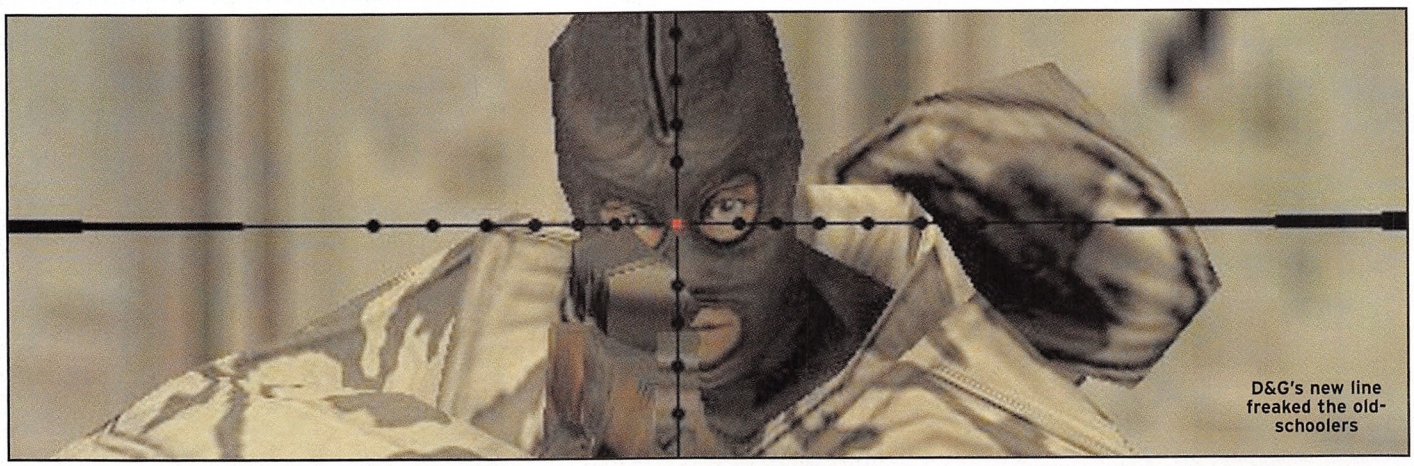
Enclave may not be the refreshment you seek amongst a sea of questing action RPGs, but you may decide to keep playing purely for the immersive experience it provides with a compelling storyline, beaut graphics, and an emotive, orchestral soundtrack. Lets face it, with a game that looks this good, who needs brains anyway?

Mabel Li



GAMENEWS

HEADLINES: PC Games get in the top ten ■ Q3 fails to make the cut ■ A glympse of things to come ■ MMORPG's aquire personality ■ Pacific Region shows it's talents ■ EA drops Motor City Online



D&G's new line freaked the old-schoolers

THE FUTURE OF FPS

What developments you can expect to see

We've loooked at the issues affecting technology and content in FPS development, and have judged eight future trends that are likely to occur.

8. Online Server Browsing

Expect game lobby rooms to disappear and be replaced by advanced website forums that feature the ability to instantly connect to the game of your choice. As time progresses, this option will slowly split apart and the player will have the choice to join a lobby-like forum or a game instantly.

7. Blasting Online Cheaters

Companies such as PunkBuster will become more popular than ever and gain further support from developers who, though they realise the problem, still fail to invent a solution beyond recognising serial cheaters. The first step may be to track information concerning each player in their game with advanced algorithms to mathematically compare data from a cheater and a player. The players are then marked by admin and then reported to the developer's master server.

6. Advanced AI

As AI increases in complexity, singleplayer games will begin to incorporate cooperative play and a number of other gameplay modes. AI will also develop characters to interact with all players in a coop game and still make it an individual experience. In the end, games will achieve critical acclaim for longevity and replay value.

5. Pixel-shader support

Not every developer's bag, but industry leaders believe pixel and vertex shaders are the future of 3D graphics. Doom 3 looks poised to set the bar for this technology, and a number of unannounced games have already signed up for Carmack's latest brainchild. Indeed, so confident is id Software in Doom 3, the developer assures the engine will last for ten years.

4. Mature Content

Likely to incur the unwanted attention of censors, government departments and concerned parents, adult content games will feature prominently on sales charts. Beyond 2003, developers will introduce new scenarios allowing players to enjoy higher levels of detail when killing or even having sex with in-game characters.

3. CD Keys for everyone

As piracy continues to escalate, CD keys will become a regular feature on singleplayer games. These single player CD keys will be just as useful as their multiplayer counterparts so developers can use them for research purposes such as viewing how long people play their game and what time of the day people play. They can even be used to pinpoint which aspects of the game players are struggling with.

2. Voice recognition

Gamers are waiting for the day when every multiplayer game includes the ability for gamers to actually talk, rather than just type trash to one another. Peripherals such as Microsoft's Sidewinder Voice Commander will become more widespread, and more support for voice will be implemented in upcoming titles. Coupled with advances in AI, the possibilities for deceptive commands are endless.

1. Mods

As time progresses, expect developers to work more closely with mod teams to ensure the game is mod friendly and that a modding community is built even before the game ships. Discreet, creator of industry-standard 3D modelling tool 3D Studio Max, is already doing this with continued development of the GMAX game system. Imagine if a game came with ten different game types, each offering its own unique gameplay, weapons, characters and specific set of maps. All this will be possible as soon as game developers take note of mod teams out there who are willing to put forth the time and effort to make additional content for a game they love.



The Monkees ruined the Gettysburg re-enactment

RECORD BREAKS

An all-time high for the games industry in the US



The new girl fitted in well

The US gaming industry posted another year of record-breaking sales in 2002. The NPD Group estimated that $10.3 billion was spent on games hardware and software last year - up 10% from the previous record of $9.4 billion in 2001.

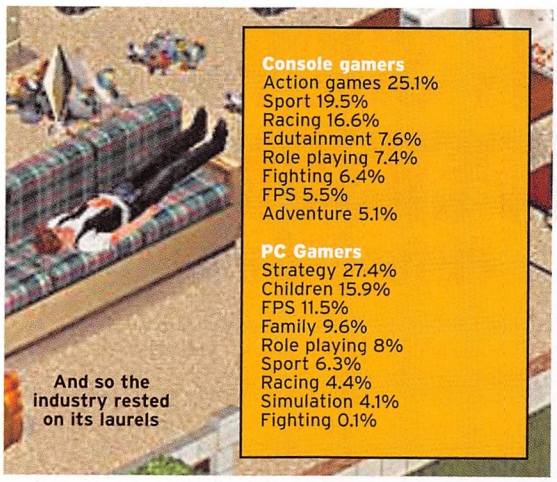
Software sales rose 21% and sold 15% more units in 2002. Hardware sales dropped four percent to $3.5 billion from $3.7 billion - but unit volume sales rose 10% as prices of hardware systems fell to almost a third of their original price in the first half of 2002.

NPD noted that of the Top 10 PC software titles in 2002, three were entertainment related. Warcraft 3 from Blizzard was in ninth place, and two expansion packs for Maxis' The Sims, occupied fifth and seventh spots.

NPD also noted that 15% of software revenue for consoles from August to December was for games playable online. The PlayStation 2, Xbox, and GameCube all introduced online capability in that timeframe.

Other data complied by NPDFunworld and released by the Interactive Digital Software Association (IDSA) indicated that in the US, while the percentage of games rated "M" for Mature is on the rise, games rated "E" for Everyone or "T" for Teen still represent the overwhelming majority of games. Of games released in 2002, 55.7% of games were rated "E", 27.6% were rated "T", and 13.2% were rated "M". About 80% of the 20 best-selling console games and 90% of the 20 hottest PC games were rated "E" or "T".

The data also revealed the genre preferences between console gamers and PC gamers.



And so the industry rested on its laurels

Console gamers
Action games 25.1%
Sport 19.5%
Racing 16.6%
Edutainment 7.6%
Role playing 7.4%
Fighting 6.4%
FPS 5.5%
Adventure 5.1%

PC Gamers
Strategy 27.4%
Children 15.9%
FPS 11.5%
Family 9.6%
Role playing 8%
Sport 6.3%
Racing 4.4%
Simulation 4.1%
Fighting 0.1%

OLYMPIC QUAKE

World Cyber Games drops Quake 3 from programme

The World Cyber Games Organising Committee 2003 has barred Quake 3 Arena from the 2003 game line-up citing an uncooperative attitude from publishers Activision.

The WCG 2003 requires all participating publishers to agree to a set of criteria, two of which the publisher of Quake 3 Arena did not comply with. The WCG listed the problematic criteria as:

1. The positive outlook and willingness of each game's publisher in working together with the WCG.

2. Support from the publisher in technical areas for the optimal operation of competitions in each game.

WGC states that Activision was averse to providing technical support to the event, and as a result was ruled as unwilling by organisers.

Age of Mythology, FIFA 2003, Half-Life: Counter-Strike, StarCraft: Brood War, Unreal Tournament 2003, WarCraft 3 are still listed as official WCG titles.



The cutesy mascots had tired of the CS bullies



Klesk's ballet debut was a runaway success

BYTE SIZE

DORM SPAM



Spammers and students have been caught in a scheme that has created busloads of irate spam recipients. Spammers had approached cash strapped students and paid them to sub-let their dormitory PCs to install a message transfer agent, which is then used as a serial pest. Tufts University caught a number of its students sub-letting their PCs and has sentenced them to a lifetime ban from the Univeristy network. A rather light sentence...



SOJOURN GIVES A GLYMPSE

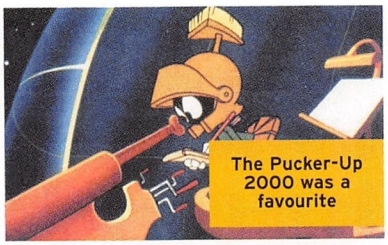
A new spherical world is set to test MMORPG's boundaries

Sojourn Development is set to release its MMORPG, Glympse, in 2004 set on a spherical world, Cael, that will be roughly the same size as the planet Mars and weigh only a few hundred gigabytes.

Sojourn will partner with Pandomedra and use its MojoWorld Technology to develop a world where players belong to factions in one of the two races on Cael to battle for the Plexus, the elemental energy form of the universe. There will be a combination of player-created, randomly generated and developer-driven quests with a tracking system that follows player actions.

Lacking an 'edge of the world', players will now be able to utilise the innovative curvature of the planet to plot trade or invasion routes, enter into combat or avoid it altogether without having to impose artificial toggle options.

Sojourn will also use the Havok 2 Physics engine to create graphics that promise to feature hyper-realistic movements for player models, land and air vehicles, and combat by blending motion-captured animation with selective usage of real-time 'rag doll' effects.

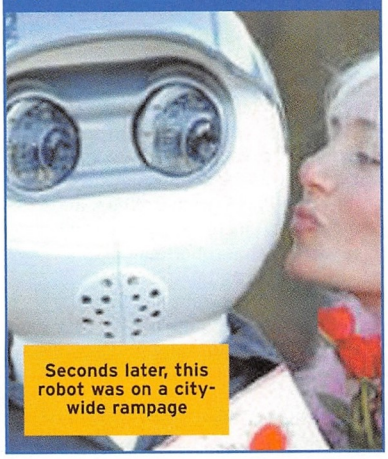


The Pucker-Up 2000 was a favourite

BYTE SIZE

LOOKING GOOD

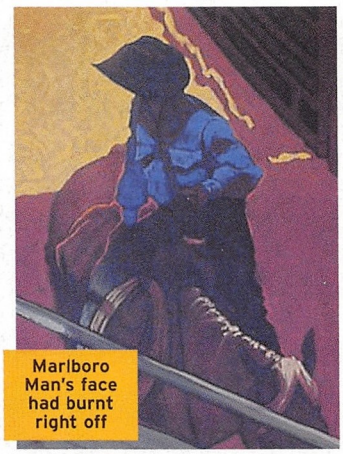
AI scientists in Scotland have developed a robotic head that measures female attractiveness to males. Using web cameras mounted in the robot's head, an image of a person's face is taken and analysed by the robot's on-board computer and compared to previous faces it has seen. The same can not be used to gauge good-looking males, as females are less likely to consider attractiveness on physical attributes alone.



Seconds later, this robot was on a city-wide rampage

UNDERLIGHT SHOWS OFF ITS PERSONALITY

PP for OOC play by Lyra



Marlboro Man's face had burnt right off

Lyra Studios has introduced the new Personality Point system, or PP, to Underlight which will aid their characters in ways not previously seen in other MMORPGs.

This addition to Underlight is an Out Of Character mechanism that will reward fellow players for positive role-playing, whether they are friends or foes, provide alternative character advancement and is also a method for dreamers to perform unique acts.

Players may use their Personality Points to aid their character by increasing permanent stats, bypassing training requirements or to advance an spell, and invoking spells the character is normally unable to cast.

BYTE SIZE

TO GOOGLE

Google™ Australia

How powerful can a search engine become? Big enough to have the American Dialect Society vote "to google" as the most useful word in 2002. But can this stalwart search engine claim proprietary rights to a verb? Probably not. Google's lawyers have sent a letter demanding that the creator of the eminent Word Spy website, Paul McFredries, discontinue using the verb otherwise he'll get a googling.



Even with Xbox inside, lonely Dreamcast still couldn't win friends

XBOX MOD

A Swedish guy mods his box with fine results.

A guy from Sweden has gone beyond painting the X red and has taken Xbox modding to another level.

PCPP isn't 100% sure on what he's done, since no one in the office can read Swedish, but we've looked at his pictures and taken a stab.

It appears that the dude moved the whole thing into a chassis that looks suspiciously like a JVC carrier, installed a mod-chip, wireless LAN, LEDs, green case lights, and Linux, and upgraded the DVD drive and hard disk.



New WTC designs worried the City Council

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1-2245.A79

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1-2245.C241

BE YOUR OWN BOSS!

Liberty Systems. There's an untapped load of boron around Pittsburgh. Or so we've heard. We're looking for someone to smuggle it through the debris ffield. Be in the right place at the right time.

LIBERTY NAVY OFFICER

We're looking for men and women to bust pirate rings and protect the

SEEKING EXPERT FLIERS

LIBERTY NAVY

New York System. Command a fleet of heavy fighters and sweep the Badlands of Rogues. Must be an expert flier and a skilled fighter who doesn't blink under pressure.

COWARDS NEED NOT APPLY

BECOME A BOUNTY HUNTER

New Berlin System. A beleaguered police force and rapidly multiplying crime sectors have made Bounty Hunters some of the highest paid people in the solar system. It is a job of extreme danger; your abilities must be superior.

LIBERTY POLICE OFFICER

INDEPENDENT MERCHANTS

New Tokyo System. Everybody wants something, and you can be the guy they get it from. There is big profit in crossing enemy lines. We will contact you.

LANE HACKER

New London System. If it's independence you're looking for, we offer you the chance to disrupt the flow of cargo, bust shipments and take what you want.
1-4156.K63

MOTIVATED SELF-STARTERS WANTED

BECOME AN INDEPENDENT MERCHANTS FIND OUT HOW!

Work for yourself — and make big profits! Smuggle pharmaceuticals and other commodities across enemy lines, and make your own rules. If you're interested, there are ways you can



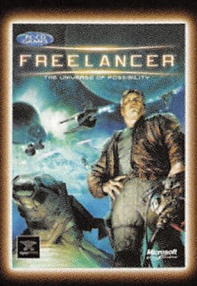






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COUNTER-CHESS

Being a wallhack aimbot llama could be good for you



Kasparov suddenly couldn't remember how the Knight was supposed to move

Professors at Loyla University, Chicago believe that playing Counter-Strike is akin to a game of chess. The academics spent hours playing Counter-Strike, interviewing players and analysing online banter to discover that FPS gamers have highly developed skills in strategy and a complex set of social codes.

Since its release in March 1999, the online Half-Life mod's popularity has intrigued Professor Talmage Wright and his colleagues who found that to outsiders, game talk is impenetrable and can even be viewed as offensive to homosexuals and females. He, however, states that this is a simplistic view that ignores the age and sex of gamers and that the dominant emotion in gaming is actually humour.

He also believes the reason insults are received in good humour is because most gamers tend to know each other, whether they were friends or enemies.

Before this study, Professor Wright believed previous investigations had skewed agendas that saw productivity equaling cultural input and since gaming was considered "mindless" compared to physical output its benefits were never considered.

Apart from honing tactical and socialising skills, the Professor concludes that fantasy role-playing is a safe option to experiment with feelings disconnected from the drudgery of reality.

BYTE SIZE

TALKING HEADS



More heady talk, the University of Texas has developed a talking robot head that can sneer, frown and even squint. Using 24 mechanical muscles, K-bot can mirror facial expressions in less than one second. Shown off at the American Association for the Advancement of Science (AAAS) in Denver, the maker plans to modify and mass-produce the two-kilogram head for a variety of purposes including training people with autism to correctly read facial expressions.

ASIAN GAME DEVELOPERS ON TOP

Pacific region is now a hotbed of talent

A recent forecast by industry analysts IDC suggests that by 2005 Asia-Pacific will become the region with the most developers, with much of the growth in China and India.

Stephen Hendrick, Group Vice President for IDC's Application Development and Deployment research believes due to recent economic issues, the US is no longer the gaming powerhouse it used to be.

"The growth in the number of worldwide developers has been affected dramatically by the economic downturn and actually caused a decline in the number of employed professional developers in North America from 2000 to 2001", he said.

In 2001 the Asia-Pacific overtook Western Europe for the number two position with 1.7 million developers. The remaining three regions, Eastern Europe, Africa and the Middle East and Latin America, accounted for a combined 1.8 million developers.

IDC believes companies seeking to target the majority of the market should address the 10 countries with the most developers in the world: the US, China, India, Russia, Japan, Canada, Germany, France, the UK and Italy. They represent 64.2% of total developers.

IDC also found that many developers are still using older third generation languages, such as Fortran and RPG, scripting languages such as JavaScript and Perl, while some have graduated to 4GLs, such as PowerBuilder and Progress, as their primary languages.

HEAVY METAL RACKET IN THE POST

Whatcha talkin' about Desi?

Controversial developer Running with Scissors launched Postal 2 at Full Metal Kick-off, the biggest machine gun shoot-out in US games press history. Any thoughts of taste and common decency were packed into the belt of a tripod-mounted, belt-fed, Browning 1919A4 sub-machine gun and blasted into the deserts of Tucson, Arizona.

Over 50 Running with Scissors supporters joined Gary Coleman (who also features in the game) and a bevy of strippers to pump Class 3 weaponry and other heavy metals in a real-life shoot 'em up.

Vince Desi, CEO of Running with Scissors said, "It was just in-frigging-sane! The phrase 'shooting your wad' is never going to be the same now that the game press got to fire what they got to shoot in the game for real out at the range!"

Desi, who became infamous with the first Postal in 1997, drew extra satisfaction at the event when he saw his development team brassing off with RPG7s and LAW rockets.

"I didn't even let anyone from the POSTAL 2 dev team take time away from their desks to go take a leak for the past two years. But once their eyes got adjusted to seeing sunlight again, they were blasting away like pros!" he said.

In typical Running with Scissors style, the ultra-violent option in Postal 2 will feature over-the-top antics that will have fans wetting their pants with laughter.





A shortage of good cotton made the nuns' winter a misery

BYTE SIZE

PATRIOTIC

The FBI's National Infrastructure Protection Center has advised against "patriotic hacking" by US citizens in the event that an all out cyber-war may incite an Iraqi counter-attack. The NIPC has based this warning on experiences in 2001 when China held the crew of a US surveillance plane after it collided with a Chinese fighter jet. US hackers responded by misappropriating Chinese websites, which had Chinese hackers responding by chop-sueying US sites.



The Prez's 'coffee-cup holder' was bust again

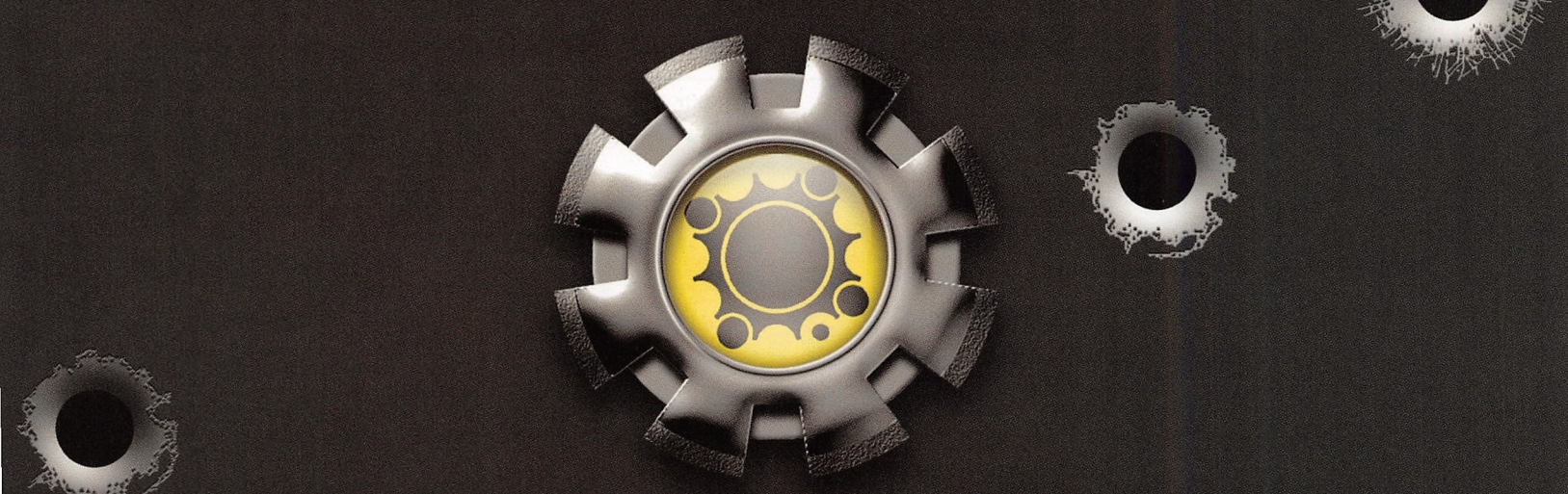
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GURPS HITS PC

GURPS Online goes online

World Apart productions and Steve Jackson Games have launched the official Gurps Online website that will allow players to sample sessions and provide feedback on game settings and GURPS Online products.

Scott Martins, President of Worlds Apart Production, was enthusiastic about the launch of the new site. "We're looking forward to feedback from other GURPS fans about the implementation of GURPS in online game settings that range from large massively multiplayer persistent worlds to player-created environments and play sessions."

GURPS Online products will focus on tapping the potential GURPS has when using one common set of rules for a myriad of game settings and genres.

The two initial settings being developed are GURPS Old West and Transhuman Space. For more information visit www.gurpsonline.com.

BYTE SIZE

NET VILLAIN

The Internet Service Providers' Association, UK, has bestowed the Internet Villain of the Year award to the UK Home Office. This is the Home Office's second consecutive win for confusing and often contradictory policies on hacking.

After the ceremony, the injuries were horrific

MOTOR CITY ONLINE RUNS OUTTA FUEL

EA drops Motor City Online



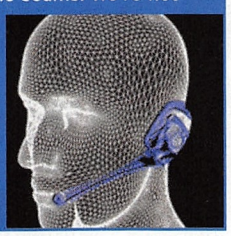
New F1 rules changed the flavour of the race

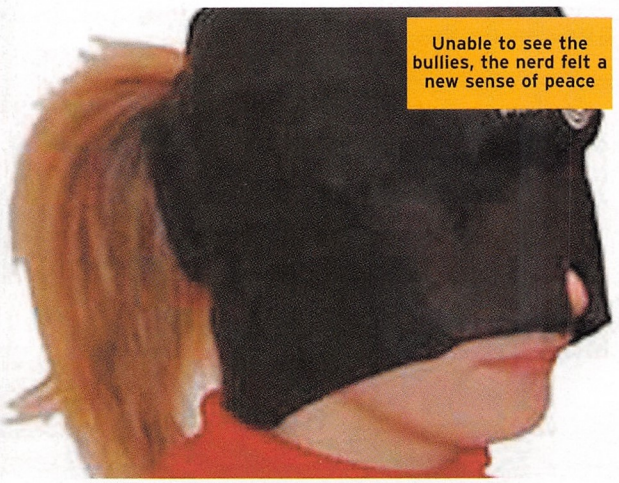
After almost two years, Electronic Arts has pulled the plug on its online racing game, Motor City Online. The game's test centre server, which used to release information about new features, had already closed on March 2, but the main servers will come down on August 29. Player event submissions will continue to be accepted through the closure of the service. Critics believe that lack of presence on the shelves had prevented the game from maintaining costs let alone make profit.

BYTE SIZE

DATA SUICIDE

A former suicide prevention counsellor is employed full-time by a data recovery firm to comfort its callers who are hysterical and unraveling at the seams. We're not surprised to learn the US based counsellor can speak to several people an hour.



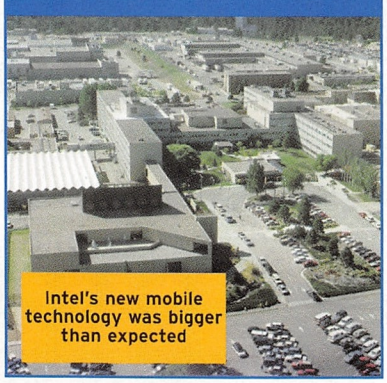


Unable to see the bullies, the nerd felt a new sense of peace

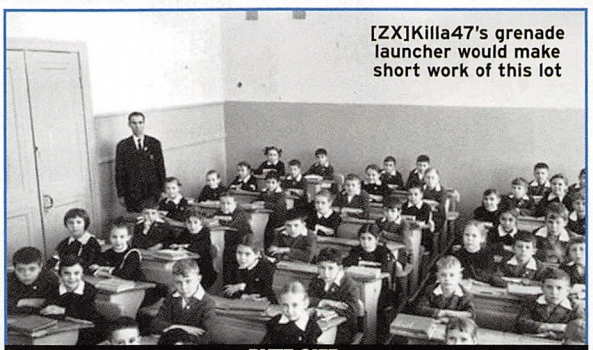
BYTE SIZE

LOS ALAMOS

As the US tightens its grip on domestic security, it's reassuring to know that the home of the atom bomb with its arsenal of weapons is about as secure as Tenenbaum against the Pentagon in 1998. A magazine reporter had apparently walked past lax security and into the Los Alamos National Laboratory top secret areas without so much as a "who the hell are you?".



Intel's new mobile technology was bigger than expected



[ZX]Killa47's grenade launcher would make short work of this lot

BYTE SIZE

BIG BROTHER

In an rather Orwellian twist, Manchester City Council in the United Kingdom has applied for a government grant to fund five web cams which are to be installed in several schools. The move is meant to control and discipline unruly students by use of surveillance without intruding on classes.

BLOCK OUT

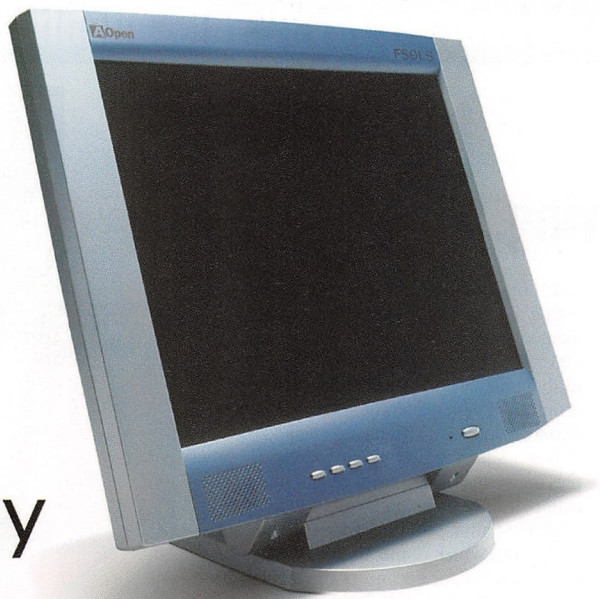
Pain brings new oppurtunities

A former bricklayer and migraine-sufferer is the unlikely inventor of a new head piece that uses light-aversion and cold-gel therapy to alleviate symptoms of migraine. Looking more like a wireless gaming accessory or instrument of torture than medical therapy, this nifty little mask works by covering the eyes to block out light while applying cold-gel therapy sachets that have been sewn into the stretchy fabric onto "pain hot spots". It's good news for migraine sufferers, as unlike traditional pharmecutical medication, with the mask there is little chance of potential allegies or adverse side effects – if you don't count looking like a moron.

Housing | Optical Devices | Graphics Cards | Sound Cards | Speakers | **Display** | Motherboard | Systems |

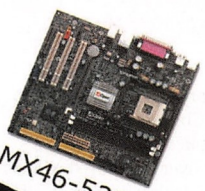
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MX46-533V



AK77-8X



A340A



KF45A



OF45A

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GAMECHASER

The flotsam and jetsam that deserves your attention with Mabel Li

AQUAZOTS
Not drowning, waving.

Developer: Anarchy Enterprises
Publisher: TBA
Distributor: TBA
Available: Q1 2003

Smells like Sims under the sea! The once named "Deep Sea Tycoon" has steered away from many of the typical pitfalls of this genre and comes alive. This refreshing title lets players not only build a seabed-city of their dreams, but transform their identity into a unique character that grows with their management style. Camera angles immerse players in the scenery.

You can closely admire your people, sea creatures, buildings, and the hustle and bustle of your city. The environmental elements and behaviour of your citizens and the slithering sealife around you serve as dynamic performance feedback. The eruption of violence on the 'street', floating garbage, and feral sharks are clear indicators for the player. The palette of playing styles ranges from casual bursts of action, intense mission tackling to long, leisurely nation building. Expect to be cast beside The wreck of the Titanic, a distressed sub, or encounter the maelstrom victims of The Bermuda Triangle. With all this and amazing visuals to match, get ready to be worked into a salty froth.

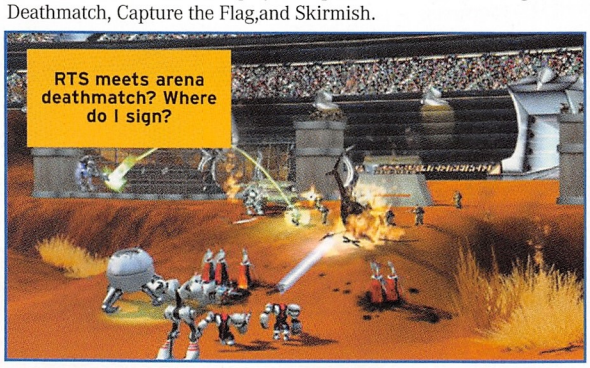


Zany and colourful doesn't necessarily preclude fun

GLADIATORS
Beware of black holes

Developer: Arxel Tribe
Publisher: Tro Sunergy
Distributor: TBA
Available: April 2003

Imagine, if you can, an RTS which melds the themes in Stargate, Gladiator (the movie) and Flash Gordon. You are Greg Callahan, sent on a mission to explore a black hole discovered by the US Military in the 1970s. Greg falls into the black hole, becomes the only survivor, is kidnapped by aliens and is taken to the homeworld of Commander Maximix, the game's villain. There, he becomes the love interest of the previous ruler's daughter, who propositions him to win political favour by fighting in the gladiatorial DeathBowl arena. If Callahan can survive the combat, the dispossessed princess can win political support and assume the throne. Broad arenas with flexible viewpoint control, thousands of spectators cheering, a 500 unit engine, and some quite useful AI contribute to this game's appeal, as does the destructible, yet extensive terrain. Ten multiplayer maps are included featuring Deathmatch, Capture the Flag,and Skirmish.

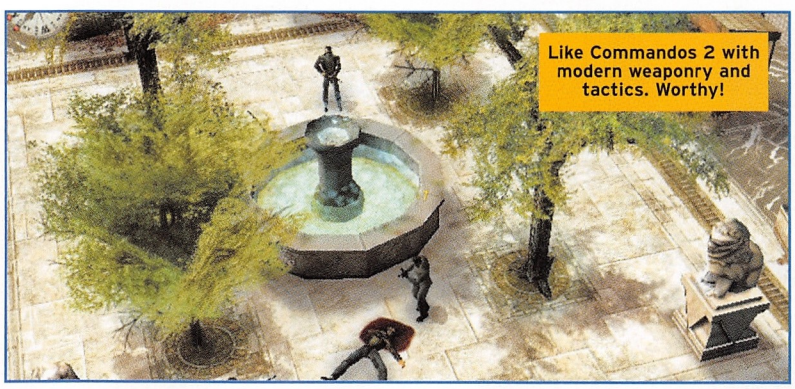

RTS meets arena deathmatch? Where do I sign?



COLD ZERO
Is don. Is good

Developer: Jo WooD Productions
Publisher: Jo WooD Productions
Distributor: TBA
Available: April 2003

Styled after Commandos, the player is plunged headlong into a treacherous and un-forgiving mafia war. This is another real-time, tactical action game laid out like Fallout Tactics. You take the role of John McCaffery, who gets in a whole heap of hurt with Don, who is unsurprisingly, the Don. The plot is based on a double-cross gone wrong which obligates McCaffery to the Italians and against the Chinese.
16 levels take you through the series of deeds McCaffery must do for Don to vanquish the Chinese and avoid the dreaded "Cappuccino".
The game has over a hundred NPCs and weapons to be dealt with. Besides talk and double-tap, more cerebral activity is rewarded with puzzles to solve and skills to master. This will appeal to those with a mind for success via discretion and stealth. An abundance of elective missions ensures that after a couple of hours your brain won't be in a state of Cold Zero.


Like Commandos 2 with modern weaponry and tactics. Worthy!

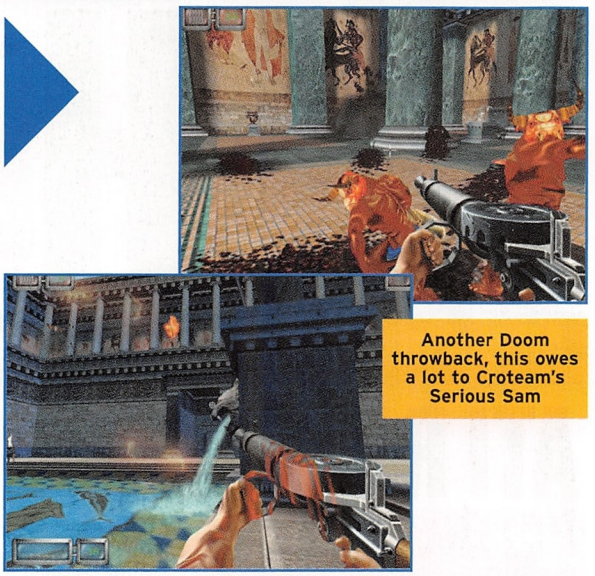
WILL ROCK

Real FPS action from Eastern Europe

Developer: Saber Interactive
Publisher: Ubi Soft
Distributor: TBA
Available: June 2003

Imagine an FPS cross between Doom, DukeNukem and Serious Sam, set in Egyptian surrounds, with baddies from Greek Mythology, and you'll get an idea of what Will Rock is about. The hero, Will Rock, is on a quest to save his love interest who had been mysteriously whisked away. Add in 11 very unique and oddly compelling weapons, and some fairly savage contorting 3D geometry transforms for some of the weapons effects, and that about visually sums up this new title.

Be careful when you splatter these massive legions of Hellenic horrors, their shattered Gibs and Gubbins will spawn smaller menaces, until you finish them all. Written in Eastern Europe by Saber Interactive, this game has unique elements, and fairly open, yet appropriate levels, and can be classed as an honest FPS with an insane quantity of interesting targets. Multiplayer competitive and cooperative, covering the normal DM, CTF, and rocket arenas, are thoughtfully included.



Another Doom throwback, this owes a lot to Croteam's Serious Sam



Tap Galactic Council and Sacrifice 26 Pluto Points

STAR CHAMBER

MOO3 meets Magic the Gathernig?

Developer: Nayantar Studios
Publisher: Naughty Dog
Distributor: TBA
Available: Late 2003

Nayantar's first game boasts of a peculiar concept: an online 4X space conquest card-collecting game. Allowing two players at a time, and depending on the cards you purchase from Nayantara, the game offers different maps for a multi-approach battle between two races of the Galactic Republic. The availability of maps comes with purchasing new cards. Private battlegrounds can be set up for mates-only games in a privacy limited universe.

The mechanics of Star Chamber is built on a strategy and turn-based battle system. Heroes will be your primary leaders, exerting influence in battle and citizens will help substantiate your influence and, hence, control over a planet. Winners will be distinguished by military, cultural or political superiority. A total of 9 races will be available to choose from, with balance possible from the varying strengths and weaknesses of each competitor. Make sure you all look out for the online download for free plays on a sample map.

GROM

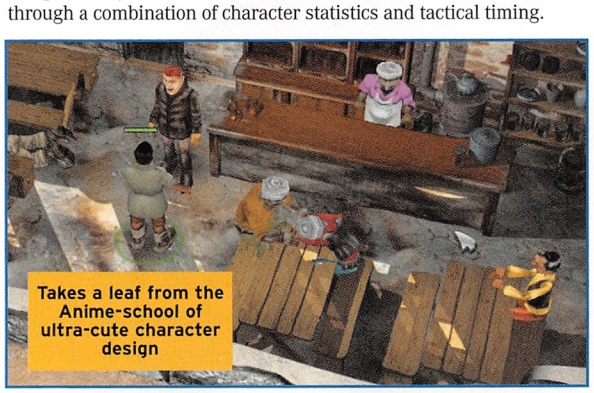
I'll take it shaken not stired

Developer: Rebelmind
Publisher: CDV Software GmbH
Distributor: TBA
Available: November 2003

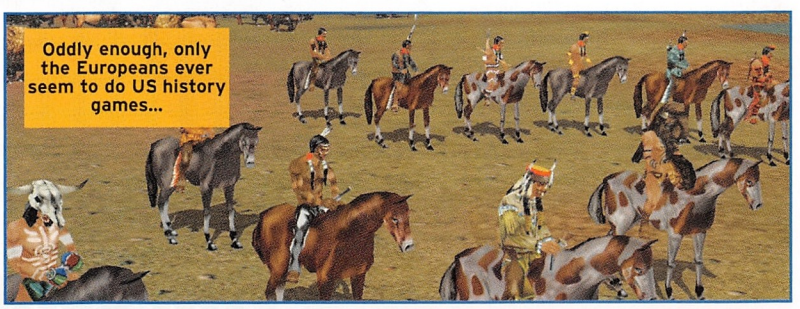
With even the most casual player in mind, this is a simplified RPG best described as stylistic mix between James Bond and Indiana Jones. It's Tibet 1942 and our hero, Colonel Grom, goes afoot to stop the Nazis from getting their filthy hands on ancient magical nukes. The story is partially based on World War 2 facts and a fantasy world filled with legends and mythical creatures.

The stumpy 3D characters have a comical effect when they are contrasted against a highly detailed 2D terrain. The plot holds many side quests and the impression of a realistic world is brought about by background characters whose lifestyles are not just limited to their role in the protagonists quest.

You will command Grom and a band of soldiers whose actions are independently controlled by the game's AI. Real-time battles are won through a combination of character statistics and tactical timing.



Takes a leaf from the Anime-school of ultra-cute character design



Oddly enough, only the Europeans ever seem to do US history games...

AMERICA 2

A New World order

Developer: Data Becker
Publisher: Data Becker
Distributor: TBA
Available: Late 2003

The Germans came up with this Wild West RTS, so don't expect historical accuracy. Most of the game play and characters are set to deliver maximum fun and jokes based on enduring cliches and stereotypes from Hollywood western movies.

Choose from the Apaches, Comanches, Mexicans, Americans and Miners and lead them to build, expand and win battles. The game has been designed for balanced gameplay and maximum graphic detail from, hopefully, minimum machine requirement. Success will be dictated by having a good knowledge of each of the races.

For example, Comanches need to hunt buffalos for resources while Indians live off the land. Mexicans can carry out espionage using hot air balloons, and the Miners have a way of releasing prostitutes upon their enemy. On top of this diversity in strength, all units, as well as entire cultures, have an unlimited upgrade system.

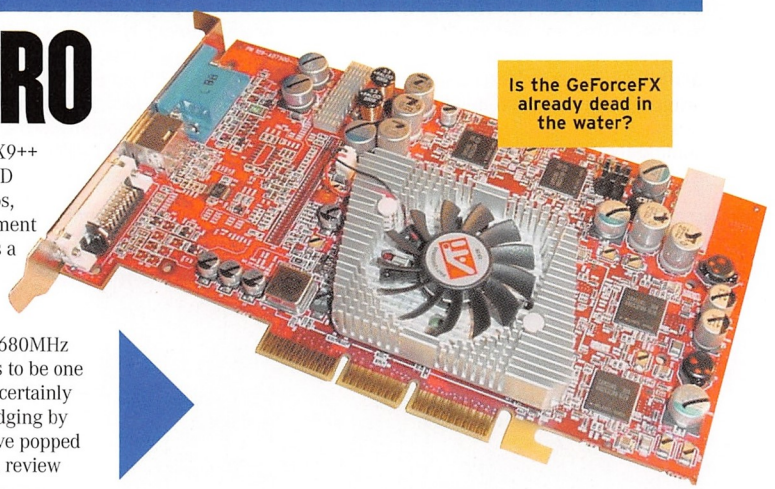
TECHCHASER

All the bits that we had to cram in at the last moment with Asher Moses

ATI RADEON 9800 PRO

Price: TBA
Distributor: www.techbuy.com.au
Phone: 02 9648 1818

Just in time for the writing of this issue, ATi released yet another high-end graphics chipset, the Radeon 9800 Pro. With its predecessor, the R9700 Pro, still managing to edge out nVIDIA's flagship GeForceFX in both the performance and price arena, it's arguable whether or not a faster chipset was even required at this point in time. That said, we're certainly not complaining! The 9800 features quite a few improvements over the 9700 including support for new DX9++ features including Floating Point 3D Textures, Floating Point Cube Maps, Multiple Render Targets, Displacement Mapping and N-Patches, as well as a revised F-Buffer, SmartShader 2.1, improved anti-aliasing and Z compression, and finally higher clock speeds of 380MHz core and 680MHz memory. In other words, this looks to be one beast of a graphics chipset, which certainly shows in its benchmark results judging by the various online reviews that have popped up lately. We're hopeful to obtain a review unit in the near future!



Is the GeForceFX already dead in the water?

P5 GLOVE

Price: $249
Distributor: www.phrixus.com
Phone: 02 9980 2578

Virtual reality is the future of gaming. You know it, I know it - it's just a matter of time before someone develops a VR device that is both cost-effective and practical. Judging from various online reviews, the P5 Glove is neither of these things, coming in at $349 and being hopelessly inaccurate when positioning the mouse cursor as well as incompatible with lefties. However, it's certainly an interesting concept nonetheless, with the squeezing of your fingers being used for button pressing and an infra-red tracker to measure the position of your hand.



USB FLASH DRIVE

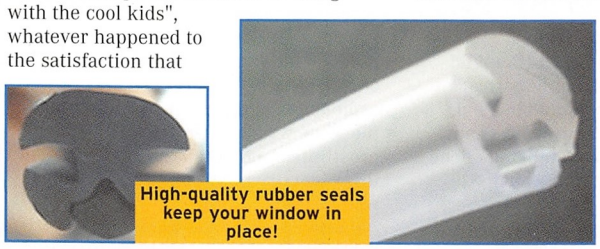
Price: $78 - $745
Distributor: www.pccasegear.com.au
Phone: 02 9568 0932

Are you looking for a quick and easy way of transferring data around multiple PCs but find that 1.4MB floppy discs are inadequate, and don't want to go through the inconvenience of burning a CD? If the answer is yes, then you'll certainly want to check out these cool USB Flash Drives. Coming in sizes ranging from 64MB to a whopping 1GB, the smaller models provide quite good value for money while the 512MB and 1GB versions are ridiculously expensive at $495 and $745 respectively.

TOP MOUNT WINDOW KIT

Price: $22
Distributor: www.pccasegear.com.au
Phone: 02 9568 0932

As the art of modifying your PC is evolving, modding your chassis has been made increasingly simple. Depending on your stance, this can be either a good or a bad thing. While mass produced case modding equipment has allowed even the most incompetent power tool user to "hang with the cool kids", whatever happened to the satisfaction that came with cutting your own piece of acrylic and fitting it into the side of your case all by yourself? Anyway, we'll save the rant for another issue. Back on topic, you'll be pleased to hear that there is now yet another addition you can make to your already tricked out case - a top-mounted window kit! These come in a wide range of sizes and are also fairly cheap, so if you're serious about your case modding and want to look down as well as in, you have no excuse not to go out and purchase one now!



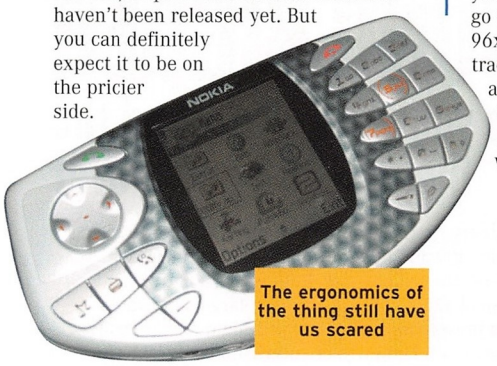
High-quality rubber seals keep your window in place!



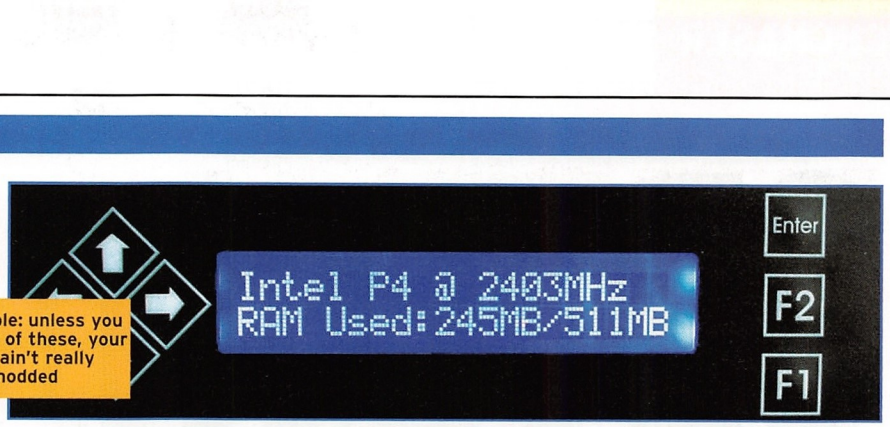
NOKIA N-GAGE

Price: TBA
Distributor: www.nokia.com
Phone: N/A

Nokia has recently unveiled its much anticipated N-Gage mobile game deck, bringing mobile phone and portable gaming technology into one tidy package that weighs in at a not-too-taxing 137 grams. If you think playing Snake on your phone was cool, wait until you see this baby! Nokia has partnered with many companies including Activision, Eidos, Sega THQ, and Taito to bring you a comprehensive list of games for the device, including classics such as Sonic and Tomb Raider, which from what we've heard look absolutely stunning on the full colour screen. What's more, all games will come on MMC cards and the built-in Bluetooth connectivity will allow you to play against your mates from up to 40 feet away. Unfortunately, the N-Gage is still some months away from store shelves, so price and distributor details haven't been released yet. But you can definitely expect it to be on the pricier side.



The ergonomics of the thing still have us scared

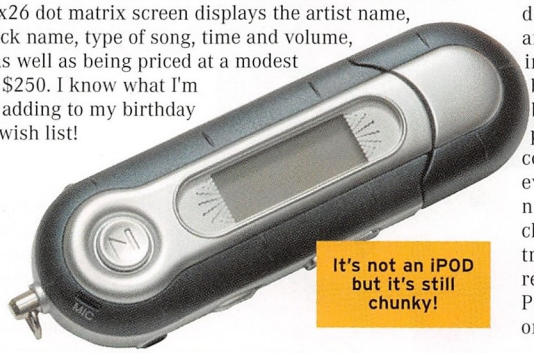


It's simple: unless you have one of these, your case ain't really modded

TGE 128MB MP3 PLAYER

Price: $250.80
Distributor: www.auspcmarket.com.au
Phone: 02 9817 2899

Operating as a storage device, voice recorder and an MP3 player, the TGE USB MP3-WMA player is an ideal purchase if you're looking for a small, lightweight audio playback device to help pull you through those boring bus or train rides that seem to go on forever! It features a 10-12 hour runtime, a backlit 96x26 dot matrix screen displays the artist name, track name, type of song, time and volume, as well as being priced at a modest $250. I know what I'm adding to my birthday wish list!



It's not an iPOD but it's still chunky!

MATRIX ORBITAL LCD

Price: $189
Distributor: www.pccasegear.com.au
Phone: 02 9568 0932

If we were to compile a list of the handiest and most useful innovations in case mods that have ever crossed our path, then the Matrix Orbital LCD display would certainly be close to, if not at the top, of the heap. This useful and ingenious device is designed to sit in a spare drive bay and is able to display a wide range of data including temperatures, memory usage, server based email, real time stock information, breaking news, current or emerging weather patterns, Winamp MP3 information (with controllable volume and tracks), game FPS and even SETI-at-home stats! Phew. Coming in at a notable price of $189, it's certainly not the cheapest thing around, however, if you're a true hardware enthusiast (and if you're reading this you probably are) then your cool PC system will simply not be complete without one of these little gems!

THERMALTAKE WATERCOOLING KIT

Price: $249
Distributor: www.anyware.com.au
Phone: 02 9879 5788

Mass-produced watercooling is finally here! Gone are the days of having to laboriously select every individual piece of equipment separately - the waterblock, the reserviour, the pump, the coolant, the hosing, the clamps, etc., without knowing whether or not the parts you have selected will be compatible with one another. And it's about time. ThermalTake has done the research and has subsequently taken the time to develop a watercooling kit for the masses. As PC components continue to increase their heat output, watercooling looks to be the way of the future. Huzzah!



Watercooling: for the insanely self-confident

SAPPHIRE RADEON 9700 ATLANTIS



Radeon 9700-based graphics cards have continued to fall in price since the chipset's initial release, and are now at a point where the majority of us can purchase one without having to sell the house, car or our children. The 9700 (non-Pro) has always been a favourite of ours here in the PCPP Tech Bunker because it provides high performance, great overclocking headroom and is fairly cheap to boot. A big thumbs up to ATI for bringing some much needed competition into a previously nVIDIA-dominated market!

Price: $550
Distributor: www.achieva.com.au
Phone: 02 9742 3288

3D TECH NEWS

Specialist news for the heart of every gaming PC with Stuart Calvin

A modern PC is made up of a dozen components, each of which can have a profound effect on the performance of your games. But no component is as vital to the gamer as the videocard. Each month, 3D Tech News will bring you the latest developments in graphics techology, plus other tech vaguely related to 3D. A picture is apparently worth a thousand words, so what must be the worth of a thousand words about pictures? Dig in and see.

ATi HITS 1,000,000

Graphics giant ships millionth DirectX 9 card

In early March 2003, ATi Technologies Inc shipped its one millionth DirectX9 compliant cinematic visual processing unit (VPU). Presumably, one million users are now able to "experience cinematic quality graphics and blistering performance with RADEON 9700 and RADEON 9500 based products powered by the world's fastest and most advanced VPUs" - yes but can they play fully-compliant OpenGL games?
At the time of writing, ATi and its board partners continue to be the only source for DirectX 9 graphics products, although the imminent release of GeForce4 FX will change that. Most, if not all, DirectX9-class games currently on the market or in development have used ATi products as the development platform because ATi has seeded the game development community with thousands of RADEON 9700 and RADEON 9500 products. Now, that's what I call aggressive marketing.



Monkey likes ATi. You should like ATi too

SAMSUNG BIGGER

Wrap your thighs around the biggest LCD panel ever

In an industry first, Samsung now offers a huge, 40 inch LCD (that's 100cm in the new money) to all ultra-rich consumers. The SyncMaster 400T sports a native resolution of 1280x768 and although targeted towards boardrooms and presentation displays, you could just as easily find one at home after a Lotto win or successful bank robbery. According to Ian Miller, Samsung's Director of Technology for displays, LCDs actually offer superior black levels when compared to other plasma displays. Although it's 'only' 40 inches, it's actually a true 720p device, unlike most 42-inch plasma monitors, which are typically only 480p displays. Last November, it retailed at $18500 but is now available from leading stores for under $15K. If a mere 40 inches doesn't satisfy, Samsung is touting a prototype 46-inch (116cm) LCD also with a 1280x768 resolution.
Meanwhile, the 24-inch SyncMaster 241MP is perfect for video, games, film and HDTV. It offers analog RGB and CVBS video input, component video, S-Video, HDTV capability and includes a modular TV tuner with an antenna connection for cable TV and satellite viewing. The maximum and native resolution is a whopping 1920x1200, just right for a bit of LAN-busting.



Imagine these sunflowers are slavering Skaarj warriors - oh yeah

FRAME BUFFER

NFORCE2 FUTUREPROOF

nVIDIA announced that its nForce2 motherboard chipset - which has been praised by major industry publications and Websites as the best core-logic chipset for the AMD Athlon XP processor family - is already able to support the full power of the recently announced, AMD Athlon XP 3000+ and 2800+.
"During development, the design of our nForce2 architecture was optimised to take full advantage of AMD technology that was not yet available publicly," said Drew Henry, senior director of platform products at nVIDIA. The new AMD Athlon XP 3000+ and 2800+ will have more on-die cache than any other desktop processor and will hopefully prove to be an awesome match with the nForce2 technology. Let's wait and see.

ASUS SPECIAL FX

Feature-packed GeForce FX 5600 Ultra promises to boost gaming performance

It seems that one of the first GeForceFX boards may have the potential to outperform, in most situations, the RADEON 9700 Pro. ASUS has cut sick with their V9560 graphics card based on nVIDIA's GeForceFX 5600 Ultra GPU.
The nVIDIA CineFX engine delivers visual effects rendered in real-time with full compatibility for OpenGL 1.4 and DirectX 9.0 standards.
We're talking 0.13 micron fabrication, copper connections, 125 million transistors, AGP 3.0 (8x) and 128 bit DDR 2 interface on the local memory.
The GeForce FX 5600 looks very similar to GeForce4 Ti4600 series but has an additional power source connector. It supports the ASUS Smart Cooling Technology which intelligently adjusts fan speeds according to system temperature, which means the fan runs quieter when system load is light.
The ASUS Smart Doctor technology will enable dynamic overclocking and system monitoring via an intuitive interface. The boxed version is fully mad with an array of games and software suites; you can even capture VCR material, digitise it and burn it to CD.

This logo's days are numbered!

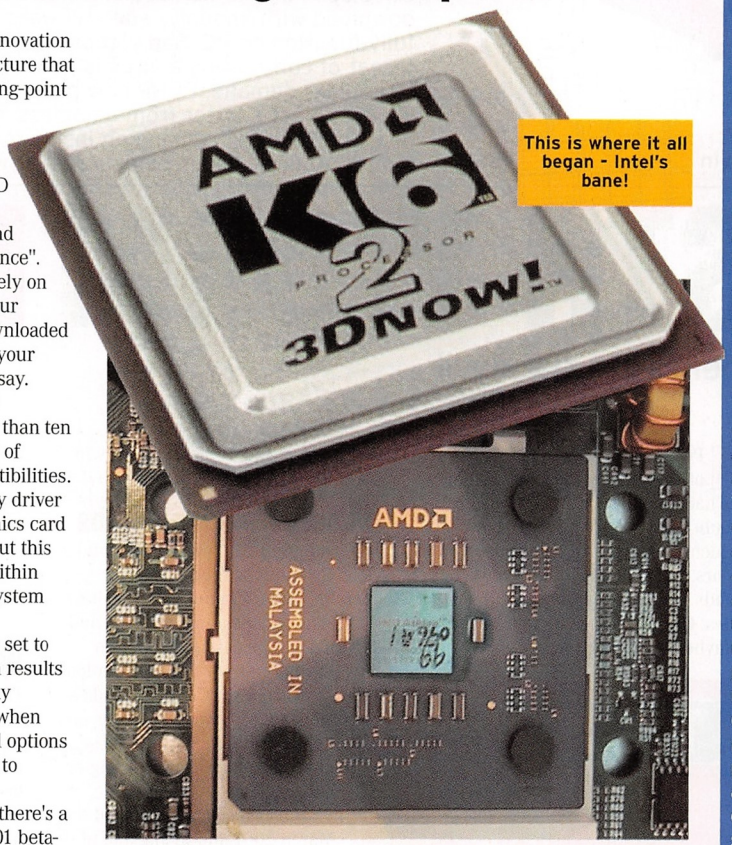
3DNOW! FINALLY FIXED

AMD's processor extensions get a new patch

3DNow! technology was an innovation to the x86 processor architecture that significantly enhanced floating-point intensive 3D graphics and multimedia performance on Windows PCs. 3DNow! technology contains improvements for better 3D performance, more realistic and lifelike 3D imaging and graphics, and the usual "ultimate Internet experience". If you run an AMD CPU, and thus rely on the 3DNow! instructions to boost your games, chances are you haven't downloaded the optimised hardware drivers for your video adaptor. "Hmm...", I hear you say. The latest ATi fix for RADEON 9700 adaptors, for example, has no fewer than ten workarounds for common problems of which five overcome game incompatibilities. ATi doesn't recommend unnecessary driver updates especially when your graphics card is functioning properly but how about this gem: "Selecting the female option within Neverwinter Nights results in the system not responding" - what-tha?

Also, playing Mafia with the display set to 1024x768x32 and details set to high results in the graphics flickering and display corruption. Also, the system hangs when Need for Speed Hot Pursuit 2 has all options set to maximum and the display set to 1024x768x32.

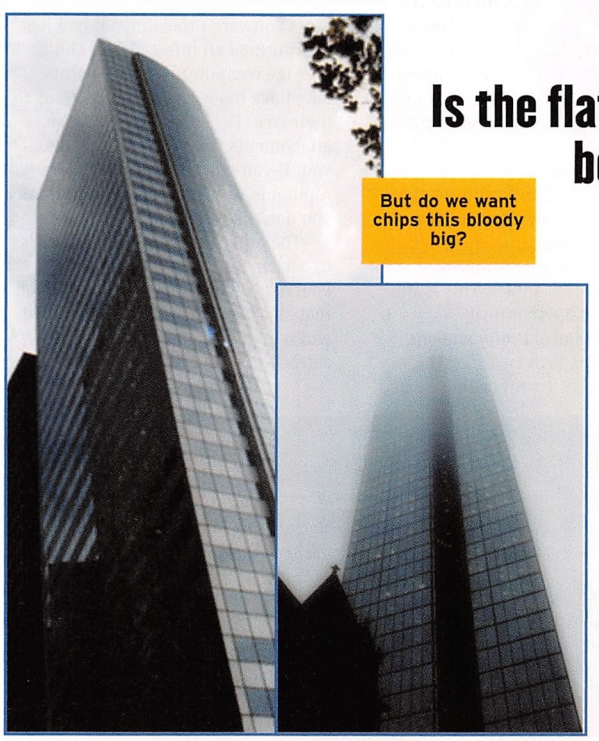
Meanwhile, for the Leadtek owners there's a Windows 9X/Me Multilanguage 4201 beta-release dated 17 Jan 2003 at a dial-up-blistering 21272 KB or 20.77 real megabytes. Do you want that and the nVIDIA Detonators? Willing to take a chance? Well, at least they support NT4. Can everyone just please visit their vendor website and save me a lot of trouble or what? ATi is very up-front about what's fixed and what's not. Only goodness knows what the Leadtek fixes are for and they won't tell me.



This is where it all began - Intel's bane!

3D CHIPS SOLVE AGE-OLD PROBLEM

Is the flat square CPU about to be replaced by a cube?



But do we want chips this bloody big?

CPU-makers and urban planners have a similar problem: they are running out of space. Soon engineers will believe they have packed all the computing power they can into a microchip's tiny real estate, ending the leaps in processing speed we take for granted. Yet you can pack more people into a high-rise than in a townhouse complex so why not turn the microchip into a cube to get more computing power in the same space? Existing integrated circuits are built using active devices within a single layer of silicon. Additional layers above the substrate are used for wiring and structural strength. A company called Matrix has developed and patented the technology to build three-dimensional memory by stacking memory arrays vertically. Matrix 3D Memory's array structure results in an archival device capable of storing data for more than 100 years.

Oddly enough, most chipmakers, including Intel, Hewlett-Packard and IBM, have jumped past 3D in favour of nanotechnology, which could allow them to string individual molecules together to create chips a hundredth of the size of modern CPUs.

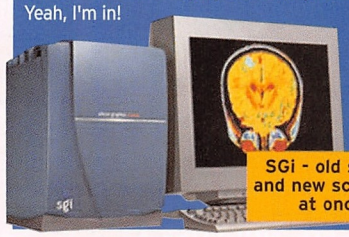
Undaunted by Big Chip's focus on nanotech, two 3D chipmakers say they are close to pulling off the cubist CPU. If successful, it will change the face of electronics by increasing semiconductor power and speed by a factor of 10 at no additional cost. The 3D chip would extend Moore's Law, which states that a chip's components will double every 18 months, for years beyond current theoretical limits. "We would not have to worry about theoretical limits for 30 years," says Fujio Masuoka, a former Toshiba engineer who invented 'flash memory", and has been working on a 3D design for eight years.

FRAME BUFFER

SILICON GRAPHICS

I love VPro graphics adaptors and I have a row of them at work in SGI workstations, and of course we dot NOT game on them using esoteric, arcane emulators. These graphics adaptors are fired by single or dual, 600/550 MHz R14000A processors and have a 2MB Level 2 cache housed in the appropriately named Octane2. The R14000A processors were built on 0.13 micron process, ages before Intel thought about it, and they only punch out 17 watts. Silicon Graphics Inc (SGI) offers a "complete set of tools and professional services to help businesses overcome core technological challenges". What this means is specialised machines that pump out incredibly clever and stupidly fast graphics. The Octane2 combines the VPro 3D graphics system, a crossbar architecture, and a high-performance MIPS processor in a power-desktop package. You get up to 128MB graphics memory including 104MB of texture memory capacity and hardware acceleration using OpenGL 1.2 core features and imaging extensions; hardware accelerated specular shading (or per-pixel normal lighting with interpolation) for realistic Phong effects without a performance penalty; advanced texture management with asynchronous texture download capability; full-scene anti-aliasing, motion blurs, and other effects; perspective-correct textures and colours and high-performance hardware clipping. Of course, it can't play games, and it costs somewhere in the region of $15,000.

But the wizardry that SGI comes up with eventually makes its way into our gaming boxes, so God bless 'em all. How about an Octane2 V12 Dual Head configuration which includes two VPro V12 graphics boards with 128MB graphics memory, two 21" monitors with high-resolution support up to 1920x1200 at 60 Hz or 72 Hz on each screen with each display stereo-capable? Yeah, I'm in!



SGi - old school and new school all at once!

VIRUSWATCH

With Stuart and Andrew Calvin

Once upon a time we lived in a world where we could go online, download with impunity and still wake up the next morning with a fully functioning PC. Sadly, those days are no more, and the threat of contracting a virus is now very real. As a result, and due to popular demand, PCPP now presents Virus Watch. Each month, we will select a letter from a hapless infected reader and explain just what the hell is going on inside their precious PC. This month, Andrew Calvin helps a reader with a bad case of worms

MAGISTR WORM

Proving email attachments are the devil

Got Virus? Write to us at viruswatch@pcpowerplay.com.au forsweet relief...

Q My computer had a virus - I say "had" a virus because the computer is no more. I thought viruses just damaged files or sent emails to people, but this one (I'm told) damaged the BIOS on my motherboard as well as erasing my hard drive. Can a virus do that?

Dead-in-the-water

A Poor old DITW. Having any kind of computer virus is no fun, but he had one of the worst. It was no doubt a variant of the Magistr worm which has been around for about two years, wreaking havoc wherever it lands. Some people just lose their files, but others lose a motherboard. Maybe if he'd had one of those Chaintech CT-6OJV mobos with twin BIOS he'd still be computing today!

It came from the depths

This mongrel is, in fact, a worm and a virus that attacks the Windows operating system family. Worms have their own transport mechanisms and don't need to be carried around in files like an ordinary virus. It can look around on a network and if it finds a suitable spot it will infect files on other computers without those other machines even running or opening files!

It was discovered around March 2001 and by the end of that year was starting to die out, as the anti-virus vendors had antidotes. Nevertheless, people still run PCs without anti-virus software, and some old sites on the net still carry infected files. Since I have no sympathy for people who don't have anti-virus software, I'm going to finish this article right now and let DITW suffer.

No, I'm not - I'm too nice and responsible.

Magistr was written in a venerable programming language - Assembler. This is the type of language that Real Programmers use. Pretty smooth, huh? It makes Java look like The Magic Faraway Tree. For those who care, the original Lotus 123 spreadsheet was written in Assembler, which is why it was about 200 kb and ran easily on a 640 kb RAM 8086. Thirty kilobytes of Assembler gives you a scary amount of program, and this virus is no exception.

Where do you get it?

The most common way to catch Magistr is to run an infected executable file (.exe, .scr, .com and so on) that you've downloaded or has been emailed to you. The latter is more likely, as Magistr does mass-mailings as part of its payload. For example, two weeks ago I received an email purportedly from an anti-virus vendor with a .com attachment. The text of the message was to the effect that I needed to update my anti-virus pattern files, and this application would do the trick. Since I happen to know that the vendors don't operate this way and would never use a .com file anyway, I carefully saved the attachment as a .txt file and my anti-virus software proclaimed it had just quarantined an infected file! The average computer illiterate punter may have followed the instructions to their cost. DO NOT run executable attachments that ANYONE emails to you. If you need it, download it from a reputable web site. But in truth, I bet you don't need it.

The other way to catch Magistr is by sharing the root directory of the boot disc of a PC on a network. Given that sharing a root directory is a bad and naughty practice, you'll never catch it that way, will you?

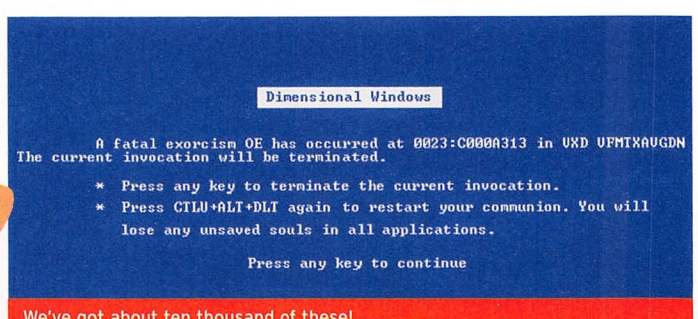
TREND MICRO PC-cillin TOP 10

Ten viruses that are easy to catch. Make sure your pattern files are updated for the following:

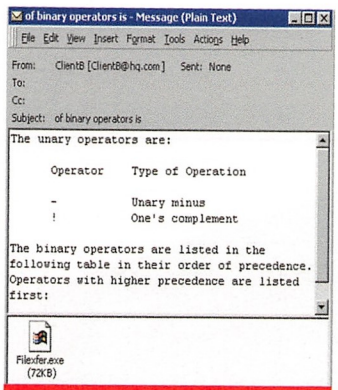
1. **PE_ELKERN.D**
   Doesn't do much except replicate
2. **WORM_YAHA.G**
   Self-powered mass emailer
3. **PE_FUNLOVE.4099**
   Hard to remove and wrecks printing
4. **PE_NIMDA.A-O**
   Spreads without even running the attachment
5. **WORM_KLEZ.H**
   Infects via email attachments. Self powered mass mailer.
6. **JS_NOCLOSE.E**
   Javascript fiddle that ruins browsing
7. **WORM_YAHA.K**
   Self powered mail mailer that chews internet bandwidth
8. **HTML_IFRMEXP.GEN**
   Spreads just by reading the email in IE based mail clients
9. **W97M_SMAC.F**
   Word virus that will really annoy
10. **WORM_BUGBEAR.A**
    Network and email infection, that shuts down antivirus software

For the latest pattern files and further details, visit www.manac.com.au, click the PC-CILLIN logo.





We've got about ten thousand of these!



This is a typically suss email

What does it do?

After running an infected file, you will end up with the program quietly sitting in memory. That means it will keep running even after you quit the infected application (don't forget, screensavers with .scr extentions are just applications, so are easily infected). After a little while it gets to work, and examines parts of your PC. It collects details about your email account and machine name, which it saves into a file in your system directory and writes an entry into the Registry. It then emails random text gathered from your files as well as infected attachments to people in your addressbook. Since your friends trust you, they'll ignore my advice and save and run the infected executable attachments, and then go and infect their friends, and so on.

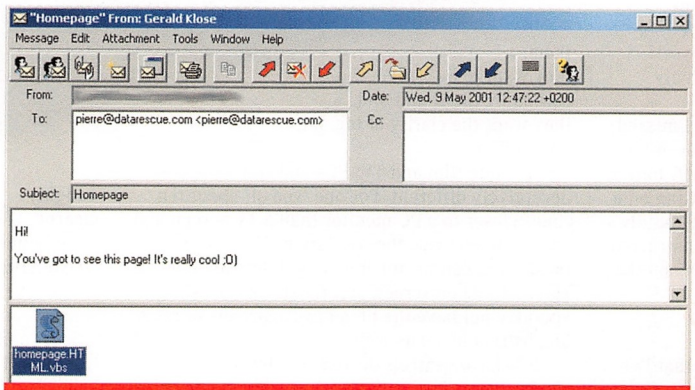
Doing this is bad enough, but there's a lot more to come. Because there are several variations of Magistr, and it's capable of modifying itself, there are several payloads, but most will have the following effects. These attacks usually won't happen straight away, and may not even occur for a month or so.

Depending on your operating system and sheer chance your CMOS will be erased. This means your BIOS will lose a number of settings, but these can be sorted out. It may then go on to erase most of the BIOS (by "flashing" it the same way you might update it to a new version). This will usually turn your PC into a Compact and Expensive Boat Anchor. There are also reports that it will damage the controllers of hard discs making them Dense and Useful Paperweights. In the meantime it will also pop up rude messages and erase files from your hard disk. This is likely to annoy you and your loved ones.

What's the antidote?

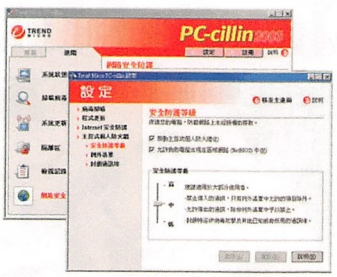
Like most viruses, the best way to fix it is to get anti-virus software and checking for pattern file updates every day. If you can schedule update checks daily, make sure you do it. Most online and large organisations check for new patterns and engines every hour.

But if you do get infected, what can you do? Most of the anti-virus vendors offer detailed instructions and even downloads from their web sites to clean PCs. In this case you'll need to delete infected files with anti-virus software, then remove the Registry key:



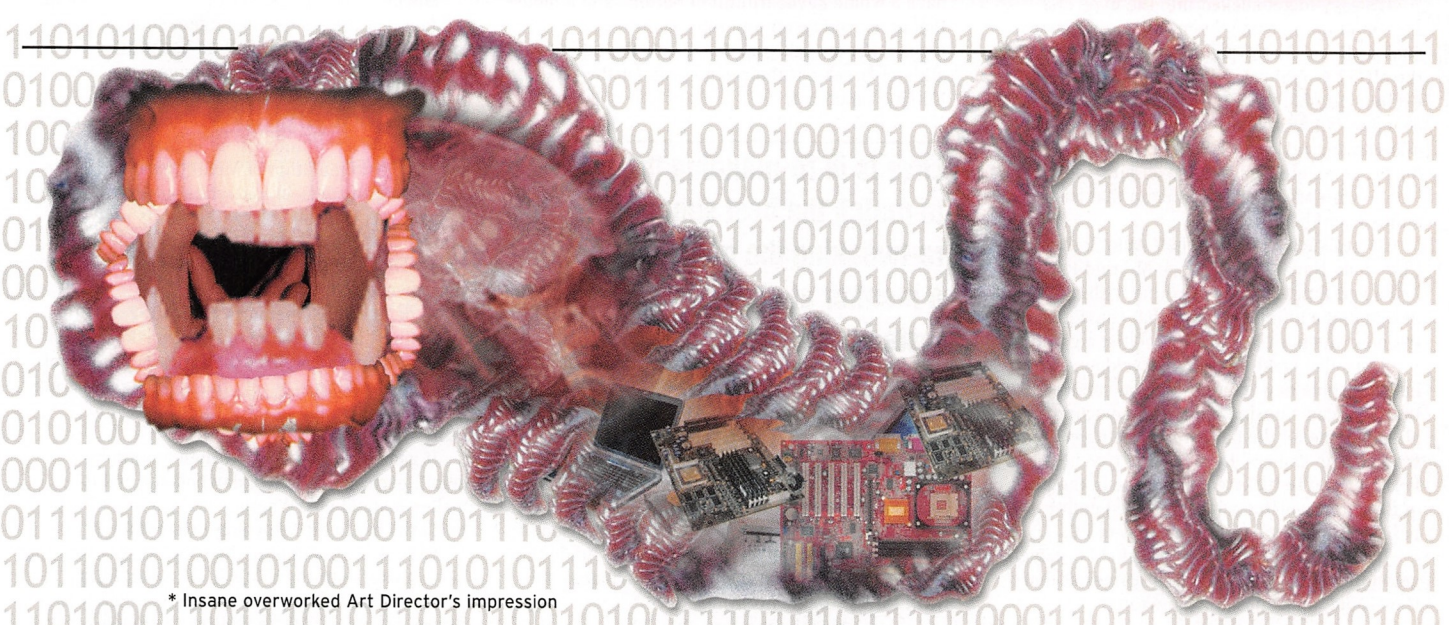
Do you know Gerald Klose? No? Then don't open his mail - simple

(HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run\ name of infected file) and edit the Win.ini file by removing the line "run=" followed by the infected file name.



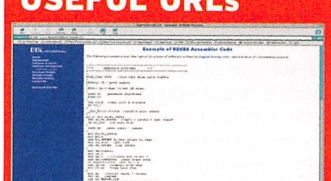
WEAR PROTECTION

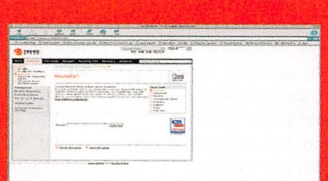
I'll try not to be harsh, but will probably fail: if you run a computer without anti-virus precautions you are a negligent idiot. I don't think that's too strong, and it applies to all operating systems. The precautions will vary according to the operating system but there is anti-virus software for most common operating systems. Even if you have a thoroughly locked down Linux server you should still run anti-virus software if you have shared directories; an SMB share can be a vector for Windows-based viruses.

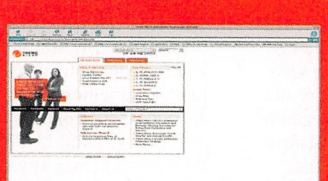


* Insane overworked Art Director's impression

USEFUL URLs


http://www.digitaldesignltd.com

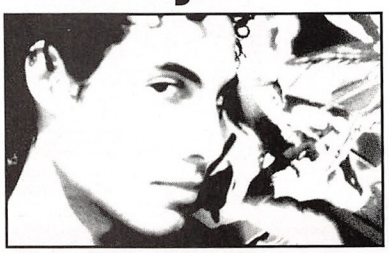

http://housecall.antivirus.com


http://wtc.trendmicro.com


http://www.viruslist.com/

ANY PORT IN A STORM

Timothy C Best



I figure that I've been around a keyboard once or twice. I'm willing to say that I've hit every key at least once - in the spirit of adventure or something very much like it - so I find myself somewhat at a loose end when I am suddenly asked to hit the "Start" button.

My keyboard is fairly new, so maybe I missed it somewhere. I have a "Sleep" button, I even have a "Calendar" button, but the nearest "Start" button I can find is on the Gameboy Advance sitting on a shelf above my PC. From there, things go rapidly downhill. Once I fire up the game, I am instructed on how to use my "right thumb stick". Ah, another cult console game has come to the PC.

A console named Desire

Metal Gear Solid 2: Substance is a game that I've been waiting to play for a while now. In fact, I was running down the street after the bandwagon.

It's easy to get sucked into the hype of a system jumping game. Even though PC games such as Doom 3 or even Splinter Cell are leaving the MGS2 graphics for dead, some imprint of the excitement of Metal Gear Solid 2 bursting from the shadows of PS2 remains. Huge marketing pushes and glowing reviews obviously worked their magic, completely selling me on how cool Snake is - even while wearing a head band that has refugee status from the 80s.

Games such as Grand Theft Auto 3, then Vice City, Tony Hawk Pro Skater 4, Metroid Prime, Zelda and Final Fantasy all shine with quality design and a unique essence that could give even the most die-hard PC fundamentalist a green tint.

Ports also make sense for developers. Why make a whole new game when you can use all of the same game design, plot, art and sound? You've already done all the hard work getting your game wedged into gamers' twisted little psyches. Perhaps, you're lucky enough to be in the position of Rockstar, which actually received online petitions to bring its games across to PC.

It's a deal made in heaven, right? PC gamers get more games to play, and hit games at that. How could a port possibly go wrong?

Horses for Courses

PCs and consoles may both play games but "similar" is a world apart from "same". Look at TV and film. If you take the best two episodes of X-Files, Buffy, 7th Heaven or whatever floats your boat and put it on at an IMAX theatre you're not going to get a blockbuster. It doesn't matter how good the acting or the screen writing is because you're burning the potential and wasting the qualities that makes the screen so awesome. IMAX audiences want to see huge scenes stretch around them,
they want to be
rocked by the sound and
they want the clarity of big, fat,
80mm film.

Just like film and TV, PCs and consoles are deceptively different. For one, you sit about ten times closer to a PC monitor than a TV screen and have at least twice the resolution. That alone means you can be much more subtle with what you're doing on screen, but the downside is that you may not have the broad brushstrokes to catch an abstract mood as well.

PCs have controls designed to let people operate complicated spreadsheets easily and graphic artist to zip around in paint programs. You have a whole keyboard full of buttons and a mouse that gives you faster and finer control than any joypad. Let me ask you, do you see the top cyber athletes break out their gamepads for the finals? No sir, you do not.

Love is in re-mapping the controls to match the best shooters; it's in re-tweaking the game and making a monitor at close range an asset instead of a liability

The Easy Way

Sometimes, for whatever reason - be it money or a genuine desire to spread joy - developers decide they have to port their game.

But how do you re-film your X-Files episode onto IMAX film? Do you get your actors to do the exact same things, in the exact same places, but with IMAX cameras rolling?

Do you hire the masters of IMAX cinematography to scout new locations, re-write scenes for dramatic effect and basically, make a different, but truly IMAX movie at a huge cost?

Hell no. The simplest option is to do a bad job. You transfer your video to film and clip the edges to make it widescreen. Or, in game terms, you take all the assets from the original game and slap on a new coat of paint by adding high-res textures, and then bring across any remaining features.

You can map the direction pad to the cursor keys and slap your other buttons onto keys roughly
nearby. You keep the
save points, because otherwise
you'd have to re-write a bunch of code
and in the case of MSG2 you leave out mouse support and keep the references to the "thumb sticks" and "Start button".

Even if the port sucks, the newly announced sequel will wash away the sins of any wayward bastard children. Simple.

Maybe, I should just shut the hell up and enjoy the fact that there's one more game out there on the PC. Maybe we should all do backrolls whenever the PS2 throws us a bone.

Perfect Portability

What people don't understand is that even if we get a perfect emulation of Metal Gear Solid we're not getting the perfect port. What made the game so good was working every fibre of its native console and controls as adroitly as Channel 10 works The Simpsons repeats or Nicole Kidman works women's magazines.

In defence of some ports like MGS2, and the upcoming Vice City, a lot of the appeal comes in the character and style of the game. On the other hand, if the game is purely based on style and not gameplay, then don't port it to PC, port it to Hollywood.

If gameplay does matter, then attention to detail, perfectly distilled play balance and love makes it stand out. Where's the love in a PC game that asks me to hit a key non-existent key?

Love is in re-mapping the controls to match the best shooters out there; it's in re-tweaking the game's pace to make the most of the quick turns the mouse allows; it's in adding a network multiplayer mode or supporting user content; it's in refining the interface for a cursor which can zip all over the screen; and it's in making the crisp and clear clarity of a 22" monitor at a, roughly, 30cm range an asset instead of a liability.

Love is updating a console game to PC in a shorter time frame than the current six months to a year. No matter how good the original game, lazy programming will never do it justice.

Love is not any port in the storm.


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PERSEVERE WITH PENTIUM 3

Stuart Calvin





Last issue I talked about the perils of low-end Intel Celeron upgrades and the fortuitous path now provided in the form of the 1.70GHz and faster models. If you do bite down on the 478-pin Celeron it will almost certainly scale, past the current 2.2GHz model to 3.06GHz. Folks still staggering along with a Pentiun 3 won't be so fortunate. Conspiracy theorists argue that the Tualatin P3s were the test beds for the Tualatin Celerons - I have to agree; they would rather an 'old' technology P3 fall over in public than a 'new' 0.13 micron process Celeron. Which is exactly what happened with the P3-1.13, now known as the 1.13A. So, what do you do if you have a P3-based system and want to wring a few more MHz out of this ageing technology, for a minimum cash outlay? Read on...

From here to there

Upgrades for the P3 are Coppermine to Coppermine and Coppermine to Tualatin. The Coppermine tops out at 1.10GHz on a 100MHz FSB and 1.0GHz on a 133MHz FSB. The Tualatin starts at 1.0GHz/133MHz FSB. In terms of performance, the Tualatin offers one advantage over the Coppermine core in that it features Data Prefetch Logic which anticipates the data needed by an application and pre-loads it into the Advance Transfer Cache. Currently, it scales to 1.40GHz.

The upgrade path for the P3 is a little clearer than the Celeron, but still limited by ultimate processor speed. There are dual-processor capable models but these are largely irrelevant for gaming. These 512KB Level 2 cache models (1.40, 1.26 and 1.13 GHz) are expensive and we'll leave them and the Single Edge Contact Cartridge 2 (SECC2) package for this issue. A comprehensive search for a P3 256KB 'GHz processor' was disheartening because I found hardly any in Australia, and only from a few vendors, but they can be had for under $140. Yes, an Athlon XP+ can be had for the same price but you're up for a new motherboard and completely new RAM. I found two consumer boards supporting the P3 Tualatin but forget on-board RAID, as these models don't get imported to this country.

As a good rule of thumb, an Intel 815x chipset motherboard starts support at P3-500MHz and the VIA 694 a little lower, depending on vendor implementation. Like the Celeron, there are three core-sizes for Process Technology and two FSB speeds: 100/133MHz. At this point, the best-bet P3 is the 0.13 micron process running at 1330MHz on a 133MHz FSB, and only if your motherboard supports Tualatin technology.

Obsolesence

Worried about buying obsolete equipment? Intel is still producing the P3 but only in the Tualatin .13 micron process. There are a couple of changes that were made to the Tualatin core that set it apart from the Coppermine it replaced. On the compatibility side, the Tualatin required a new motherboard chipset because of a lower voltage clocking specification. Since the release of the Pentium Pro, all Intel P6 processors have used GTL+. What this actually means doesn't matter, just be aware of the difference I'm about to point out. The GTL+ implementation actually changed slightly from the Pentium Pro to the Pentium 2 and 3, and thus the latter implementation is known as the Assisted GTL+. Both of these FSBs use 1.5V signalling, but the Tualatin uses a lower voltage bus that runs at 1.25V. More specifically, the Tualatin uses AGTL+ signalling that unfortunately requires a new chipset with support for 1.25V AGTL+ signalling, instead of 1.5V AGTL+ signalling.

The upgrade path for the P3 is clearer than the Celeron, but still limited by processor speed - there are dual-processor models but these are irrelevant for gaming

Because it is manufactured on a smaller process, the Tualatin requires much less power than the Coppermine core. The VRM 8.4 specification (confusing motherboard electricity stuff) that was used by the Coppermine, unfortunately only provided support for voltages in 0.05V increments. The Tualatin requires a new VRM specification, VRM 8.5, that adds two additional pins for smaller voltage steppings of 0.025V voltage increments. This means that the Tualatin Pentium 3s did not work on current motherboards at the time of release. Tualatin-based Pentium 3s require a new motherboard and also a new chipset. Intel released a revision of the i815 chipset with support for the Tualatin core, known as the i815 B-Step. The 815 B-Step is actually based on the 815EP core. VIA also has Tualatin support in a couple of their chipsets: the Apollo Pro 133T and the Pro 266T.

Depending on vendor implementation these chipsets also support Tualatins: 815E, 815, 815EP, 815EPT, 815P, 815G, 815EG, 810E2, 810E and 810. I say depending because, for example, the MSI MS-6337 815EPT Pro Revision 5 motherboard supports Tualatins up to, but not including, the 1.4GHz, whereas Revision 3 does not. I think the Gigabyte GA-6OXT-A 815EP supports the full range, but their website is unclear. I know the AOpen AX34-U with the VIA 694T (Pro133T) supports Tualatins, but not the entire range.

To upgrade or not to upgrade

What are the downsides of upgrading instead of saving up for a whole new PC? The limitation of PC133 (PC150 if you're fortunate) is memory only; it's not scaled with the P4 and not pin-compatible; there's limited vendor support for Intel, only slightly better for VIA. If you have a 0.25 micron Coppermine 600B, 533B, 450, 500, 550 or 600 MHz processor, it will depend on your motherboard as to whether you can jump to a 0.18 micron 1GHz. If you have a 0.18 micron Coppermine 500E (at worst), you should be able to jump to 933 or 1.10GHz at best depending on the motherboard. The fastest 133MHz FSB processor is the 1.0GHz model (it should really be an "EB" model); there are 1.0 and 1.10 versions for the 100MHz FSB.

So, at the end of the day, it is possible to keep upgrading your old P3-based machine to get at least another year of life out of it without having to shell out for a whole new motherboard, memory, videocard and in extreme cases... uh... a case. But the usual caveat applies - an upgrade is never a substitute for the real thing. Save those pennies. You must own a 3GHz machine. Say it every night, six times, before you hit the hay, "I must own a 3GHz machine."

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We were due to annouce the winner of the mighty Matrix PC this issue but infortunately we are still waiting on some parts even after all this time.
A proper announcement will be made in the May issue, PCPP #87 on sale May 7th 2003.

American Conquest

----- Three Centuries of War -----

The New World is ablaze in American Conquest, the newest real-time strategy offering from the makers of Cossacks!

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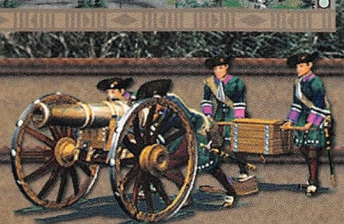
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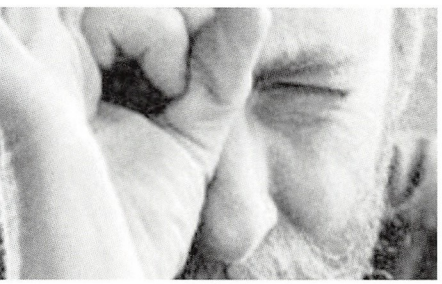
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IN PREVIEW GAMES

THEY GIVE US THE CODE, WE GIVE YOU THE LOWDOWN



Whither now the future of PC gaming? We've had such an unbalanced bunch of months - first the great scare of Christmas 2002 in which the PS2 overtook PC's market share, and now here we are in the early months of 2003 with PC back on top but PS2 still frighteningly close behind. What now? Where are we headed?

Sadly, we won't have a definite answer until after this year's E3 - the Electronic Entertainment Expo held annually in Los Angeles' frighteningly huge convention centre. Inside, new announcements will make us sit up and listen, while concrete details about such hinted-at games as Thief 3 will get us salivating again after the long dry-spell of late 2002.

Speaking of the dry spell, the gaming drought is still here, and we will have to wait until May for fresh cooling rains of new code - a case in point is this month's cover feature game which is a PS2 port. Still, when the port in question is GTA Vice City, there's not an awful lot to complain about. Freeform is definitely the word de jour and Vice City promises another big dose of this after the disappointment of Freelancer.

This month we also picked up Devastation. This is an intriguing title from the publishers of the unremarkable Duke Nukem Manhattan Project, a 2D platformer that attempted to wring a few more dollars out of the now laughable Duke Nukem franchise. But Devastation is something different - a shooter using the Unreal Warfare engine that promises to add a little extra spice to a fairly staid genre.

In fact, with the par for bot intelligence set damn high nearly five years ago with the Reaper Bot and others for the original Quake, it's a wonder no one has created an FPS with a decent AI-controlled team yet. And Daikatana does most definitely not count.

For the last three generations of 3D engine, bots have had the ability to map their way through levels, understand where strategic choke-points are located, monopolised favourite weapons, and indeed programmers have had to insert clever rountines to stop them camping.

Why then, has no developer used this bot technology for co-operative team mates instead of just deathmatch opponents? Are the very AI routines themselves incompatible with co-operative play? Surely not - Quake 2 and Quake 3's bots can play Capture the Flag well enough to fool the casual gamer.

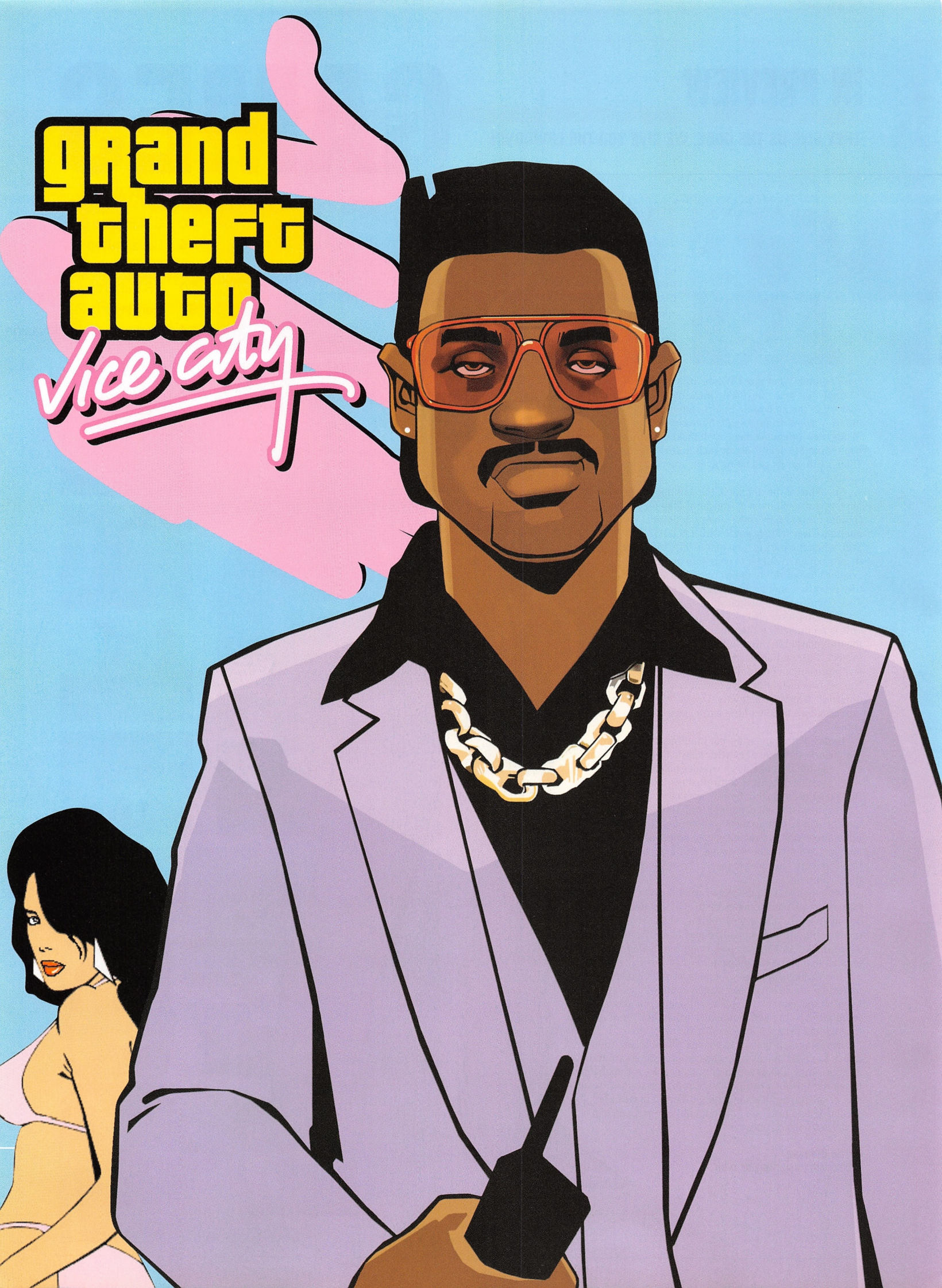
The various Tom Clancy games have included AI team mates, but these have been largely employed as 'spare lives' by the gameplay dynamic, allowing the player to jump into another squad member when they get shot through the eye by a Russian Terrorist.

Devastation promises to change this, offering squad mates as smart as any bot, who can be ordered around via a set of simple menu commands. Of course, it remains to be seen if this lofty design ideal can be matched with any sort of reality, but it's something different in a sea of similarity and hey, you grab onto any life-raft you can, in these troubled times.

Justin Hoffman
letters@pcpowerplay.com.au

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grand theft auto
vice city

Welcome to Miami

and all things Vice

On its release in Australia, Grand Theft Auto 3 drove straight into the shop window of censorship and caused such controversy it was taken off shelves during the lucrative Christmas period. Now Rockstar North will be releasing its sequel, Grand Theft Auto: Vice City, which has fans salivating and the censors worried. Will the same dispute rear its ugly head? Or has Rockstar toned down the action? Timothy C. Best take a look at what Vice City has to offer.

Developer: Rockstar North
Publisher: Rockstar
Distributor: Take2 Interactive
Due: late May



Banana cars and bad shirts - that's Vice City!



A Vespa! Now that's worth stealing!

Welcome to a wonderland of surf and sun. Whatever you want, it's there in lingerie. Whatever your dream, Vice City can bring it to life, as long as you have the money, cajones and happen to be in the 80s. Cue the Miami Vice music.

Now that you have the image of Crockett and Tubbs sliding across car bonnets and driving speedboats, imagine stepping out of the vice squad, and slipping into the vice. Doesn't that sound like a whole lot more fun?

Rockstar North thinks so and have used this is as the backdrop to Grand Theft Auto: Vice City. The winning combination of 80s decadence and gangster action has helped sell millions of copies of the PS2 version of the game worldwide.

The story follows the fortunes of a wise guy named Tommy Vercetti, who'd just spent 15 years in the big house after being set up. Now he's out, the family decides to send him to Vice City to check in on the drug trade and buy some of the local gear.

The game kicks off with Tommy's first deal turning sour - as sour as a mob boss who finds out you're bonking his daughter - and Tommy is left high, dry, and in the firing line. Luckily, he isn't a guy completely without resources and he starts using his shady connections to hunt the low-life who pulled the fast one on him this time. Naturally, this leads him to work for several local bigwigs, execute many a dodgy deed, run across colourful celebrities and bikini-clad babes, as well as switch sides more often than an alternator.

Vice Beats Liberty Any Day

While Grand Theft Auto 3 captured the dreary and grey mean-streets of a Scorsese film, Vice City calls on all the loud and bright colours it can find.

The stunning 80s backdrop of Vice City is one of the most impressive elements of game. It celebrates that selfish and gauche charm distinct to the decade without losing sight of the game's core theme of gangster violence. For example, instead of chasing people with a baseball bat, you chase people with a golf club. It's still very 'mob', but it's mob in a bad Hawaiian shirt.

To make the most of the atmosphere, Rockstar North promises a city teaming with action. The goal here was to create a sun-loving Miami Vice culture where Tommy has to sidestep health freaks on roller-skates, see cops run down bad guys like a scene from a cop show, dodge street fights, listen to people chat in the street and take in a pole dancing show.

The whole place is bursting with life and there's supposedly a



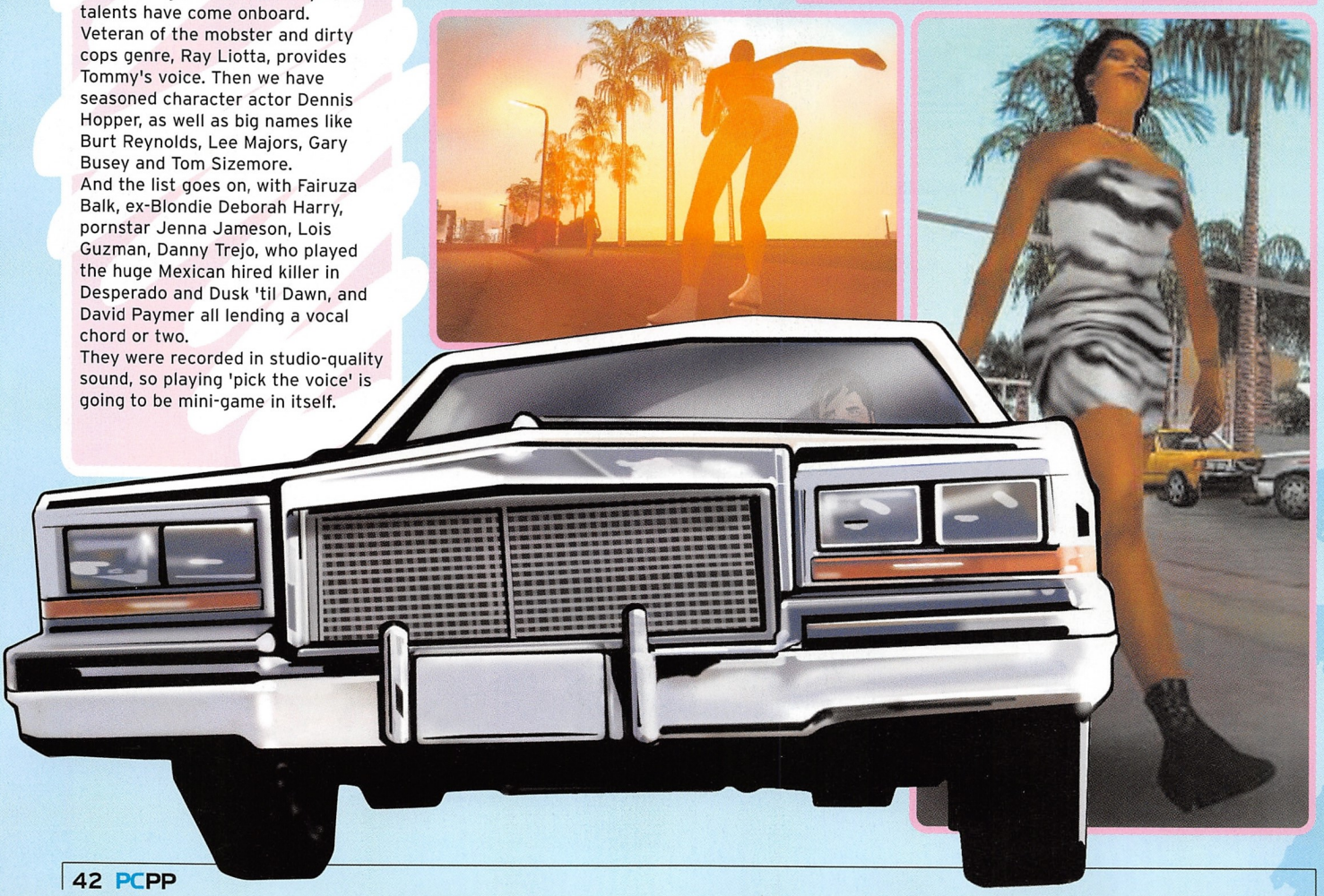
A little boating action should prove a welcome distraction

Tommy Goes to Hollywood

One of the most awesome things about the game is that Hollywood talents have come onboard. Veteran of the mobster and dirty cops genre, Ray Liotta, provides Tommy's voice. Then we have seasoned character actor Dennis Hopper, as well as big names like Burt Reynolds, Lee Majors, Gary Busey and Tom Sizemore.

And the list goes on, with Fairuza Balk, ex-Blondie Deborah Harry, pornstar Jenna Jameson, Lois Guzman, Danny Trejo, who played the huge Mexican hired killer in Desperado and Dusk 'til Dawn, and David Paymer all lending a vocal chord or two.

They were recorded in studio-quality sound, so playing 'pick the voice' is going to be mini-game in itself.





Smooth cars, smoother drivers



Our hero, about to get things underway



Re-enact THAT scene from Jackass: The Movie

Weapons of Vice

Vice City might be the party capital of the US, but don't let that fool you into thinking the streets are safe and everyone is keen to see you enjoy yourself.
Besides the usual Rocket Launchers, M60s, sniper rifles, AK47s, Colt handguns, Molotov cocktails, knives, hammers and machetes, players also get to tout a classy chromed shotgun, a not so classy but deadly automatic shotgun, a screwdriver, katana, golf club, and, our favourite, a chainsaw.
One of the new features of the game is the ability to target specific areas. So, now you can shoot out tyres and watch enemies spin away, and then blast them through the windshield. You can also make cinematic leaps between speeding boats before letting loose.

1000 pages of scripted dialogue if you spent the time to talk to absolutely everyone in town.

To contain all that energy, Vice City is going to be two to three times bigger in square meters than Liberty City, and it's even bigger when you realise that you can now explore inside the city's many notable buildings in order to get a feel for the town.

Once you have are familiar, the most complete soundtrack we've ever heard in a game will transport you back in the 80s. Vice City features nine hours of audio, on seven stations including Flash FM (which is Flashback in GTA3), Emotion, V-Rock and Wildstyle.

The music includes songs from Michael Jackson, Iron Maiden, Judas Priest, Flock of Seagulls, Wang Chung, Twisted Sister, Nena, Foreigner, INXS, Frankie Goes to Hollywood, Blondie, Kim Wilde and even Grandmaster Flash and the Furious Five. Phew!

Creeps

The characters in Vice City also ooze excess and gaudy fashion. Tommy exudes a vivacious and lively personality when compared to the strong and silent thug from GTA3. He's a mouthy son of a gun and his flamboyant macho charm and manly hairstyle, seems to work a treat in amongst the sexist scum floating around Vice City.

If reports from the PS2 are anything to go by, the dialogue between Tommy and various employers is pretty spectacular - full of references to the days of the TV show, Jake and the Fat Man.

Even the minor characters ooze colour. They include a movie producer with a thing for sharks and mash potato sculptures (who could that character be based on?); a batty television Evangelist; a psychotic soft icecream distributor; a bent cultural attachÇ to the San Dominican consulate; a holiday camp commandant, named Mr Black, who's rumoured to be a money launderer and hitman (Camp Krusty anyone?); and, of course, a transvestite with mob ties who's about to go down the river with unpleasant consequences.

In Vice City it's all about style, or, a least making the most of what little it has into an art form.

Crime

As Tommy, you'll have to hand out... er... adult pleasure brochures in broad daylight, take control of a strip joint, annoy bikie gangs, extort, assassinate, break and enter, take on a heavily guarded junk-yard full of voodoo heads or, alternatively, assist the junk-yard owners pick up their Haitian drug stashes.

The game's mission structure is in a greater state of free-form than GTA3, and instead of making enemy after enemy, Tommy will actually make some friends who will pop up at odd times to come on missions with him.

The developers at Rockstar North were obviously really taken with the Bomb Da Base mission from GTA3 because missions with multiple objectives involving driving, on-foot carnage and temporary partners in crime are now much more common this time around.

Assignments will also now come to you and Tommy wil receive his calls from mobsters on his stolen giant-sized 80s cellphone.

Sometimes, you'll even get the choice of which side of the gig you'd like to work.

All this work isn't just in the name of revenge; there's also a little matter of cash.

Cash

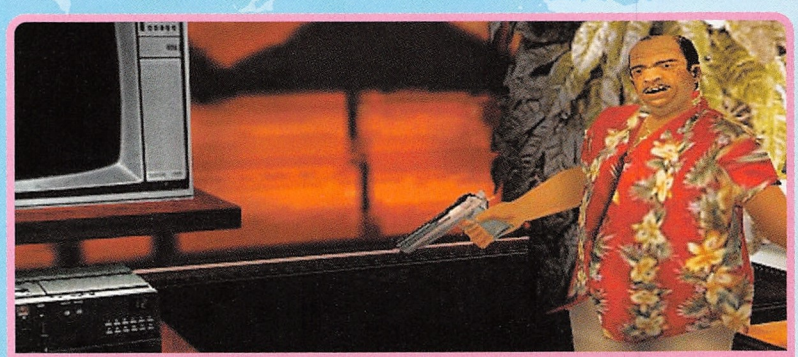
If Tommy's hard up he can earn a buck or two delivering pizzas or selling icecream, and when he has enough pennies he'll spend it on something decent: a kicking pad.

In the beginning of the game, Tommy only has access to one part of the city and can only save money at the hotel. This soon changes as Vice City offers up opportunities to get into real-estate.

Some properties open up new missions like the Pole Position Club and the Film Studio, while others, like the condo, just give him another hideout and



The local Pizza emporium will form the focus for many gangs



Fat mobsters still feature heavily, even in Paradise



Now this is my kind of bar!



That's how I like to dress around the house



Subtlety is sadly a lost art

garage. One of the big steps forward for Vice City, is the ability to go inside and check out not only your new purchases but a wide range of buildings.

Ever wanted to diversify your job description and skills from car jacking to, say, robbing a jewellery store? Well, now you can. Vice City will pack about 60 interiors, including the night club, shopping centres, stores and showrooms all ripe for the picking.

If you can't get you can't get into mischief in Vice City then, well, there's something wrong with you.

Cars

Amongst all this 80s glitz and cocaine-fuelled partying, let's not get carried away and forget the sole premise of the game - grand theft.

For starters, Vice City offers about 120 vehicles types to jack, which is more than twice as many than GTA3. It also promises two major additions to dare-devil driving. The first, is two-wheeled action with several impressive motorcycles making their debut. The two-person lowriders give players the opportunity to execute that bikie savoir-faire, while the sports bike offers pure speed, and the moped offers plenty of opportunities for absurdist humour. Players can now zip down the middle of the road, squeeze between traffic and let their hair blow against the wind. Alternatively, you can have tattoed fun with a gang of Harley-Davidson bikies.

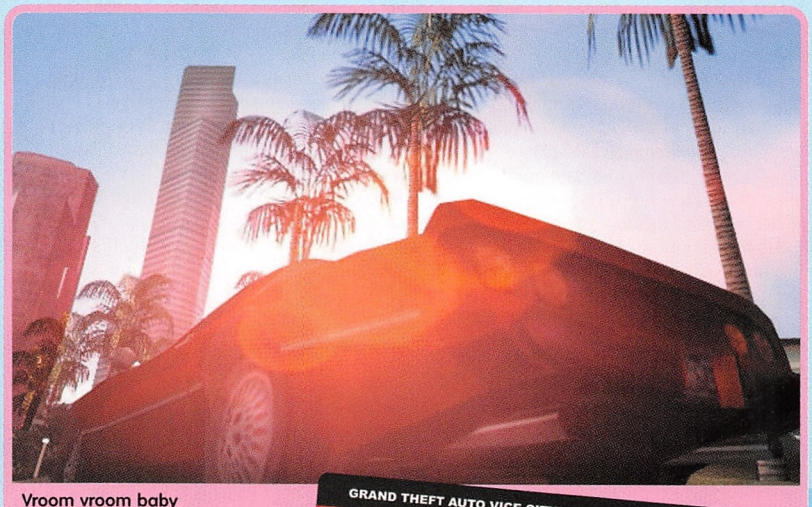
Bikes also allow players to perform much more deadly drive-bys since riders are almost unlimited in their shooting range and are able to shoot front, back and from both sides of the bike. However, using the bikes on the offensive may not be the best idea since one good nudge could have you eating gravel.

The other main addition to the vehicle roster is of the flying kind. In a city of wealth, illegal Mexican immigrants and party-people present a threat, so helicopters are a must. Tommy will get to fly these babies around in several missions which makes island hopping an easy and efficient task.



Hog or Countach (below)? Only you can decide!

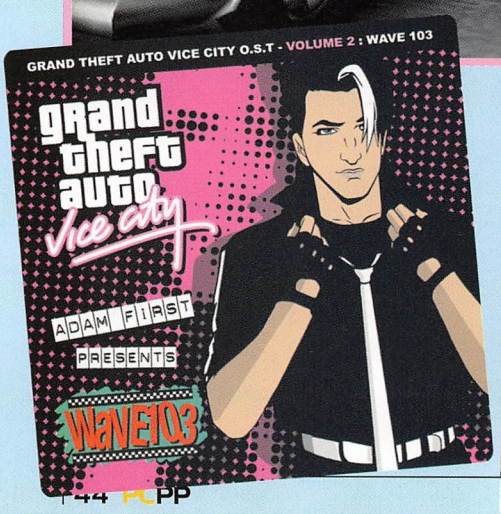


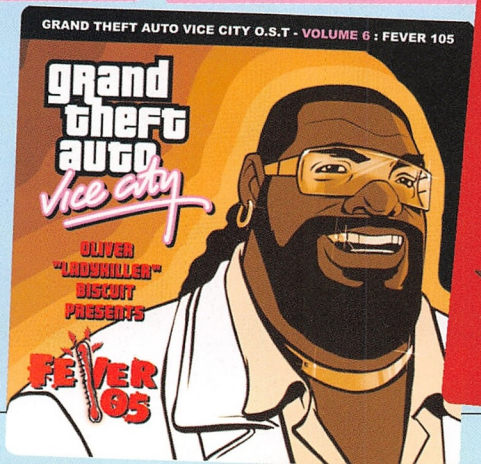


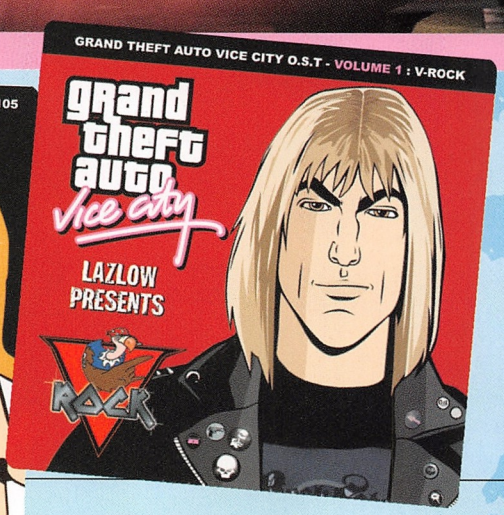
Vroom vroom baby

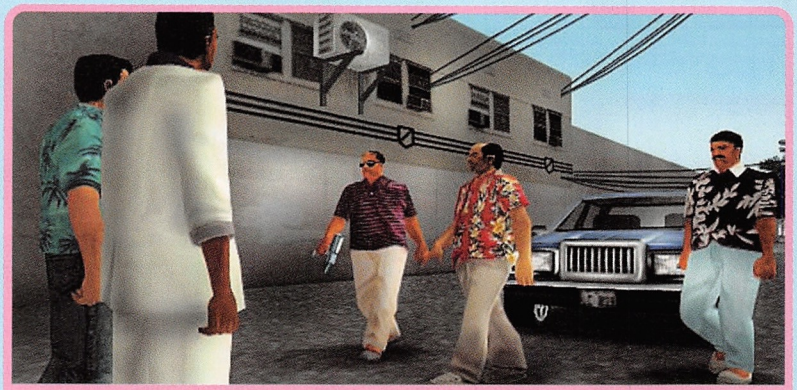
Miami Vice

Back in the 80s the first couple of seasons of Miami Vice was a huge hit and had Emmy nominations coming in left, right and centre. Don Johnson played detective James 'Sonny' Crockett and Philip Michael Thomas starred as detective Ricardo 'Ricco' Tubbs. The developers don't deny taking inspiration from Miami Vice's and have even tipped their hat off to the show by featuring Ricco's voice in the game.
Guest stars included Liam Neeson, Frank Zapper, Bill Paxton, Bruce Willis, Chris Rock, Laurence Fishburne, John Turturro, Julia Roberts, Melanie Griffith and even Miles Davis.
Miami Vice started in 1984, two years before Vice City is set, and it fixed the standard for hip cop action and also fashion: white suits with rolled up sleeves over coloured T-shirts.





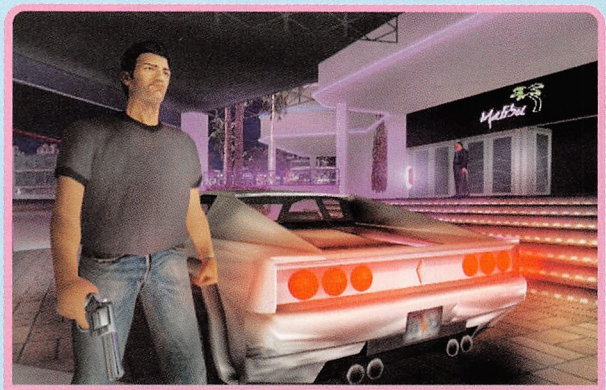




Gunfight at Arturos the Famous Fish Restaurant

during the game.

Finally, the developers have announced that the PC version will have greater options for customising the game. What this means is that players will be able to tweak Tommy's physical appearance, even to the act of importing your own custom skin. If you want him to look like a stingray or even take immersion to another level and place yourself into the game, Rockstar's going to let you.



My tail lights will burn you, esse!

Vice and Virtue

From what we've seen so far, Vice City is hardly going to push the limits of 3D graphics on the PC but, luckily, this doesn't concern us. What we think Vice City is about is outrageous core missions surrounded by open-ended gameplay, where the player gets to run up to the authority, give it a wedgy and then shoot it in the arse.

GTA3 was a blend of hard-nosed crime fiction conventions, adult themes of a quirky nature and healthy doses of humourous self-deprecation that took violence to ridiculous levels. Vice City takes all of this and slides it into a setting which celebrates corrupt politicians, decadence, car chases and bad suits. It opens in 1986, which just happens to be the hey-day Miami Vice, and plays on the conflicting perceptions of the 80s, an era which wanted to be seedy and tough, but in retrospect, seems cute and colourful.

Grabbing all of this, Vice City is a leather-tied, over-sized rumpled jacket - magic in its colour and style with amazing attention to detail paid to the music, the clothes, and the characters who wear them. It promises to survive porting and looks like it'll be more fun than Ozzie Osbourne at a Wham concert.

Not so PC ... Yet

Vice City's feature set is unlikely to change much, which means we have a good idea of what to expect in May. That's not to say the PC version is going to be identical to PS2's Vice City. Quite the opposite, really.

Fisrtly, all of the textures are being redone and replaced with higher resolution images. PC owners will probably be able to read those signs that were just a suggestive blur in the original PS2. It will also support hardware acceleration, have access to Directx video goodies and, on a decent rig, it should run faster and more smoothly than on the PS2.

Audio is getting a similar treatment and recordings will be upgraded to studio quality that will do justice to the brilliant soundtrack and voice acting. Vice City will also make use of accelerated sound cards with EAX capabilities.

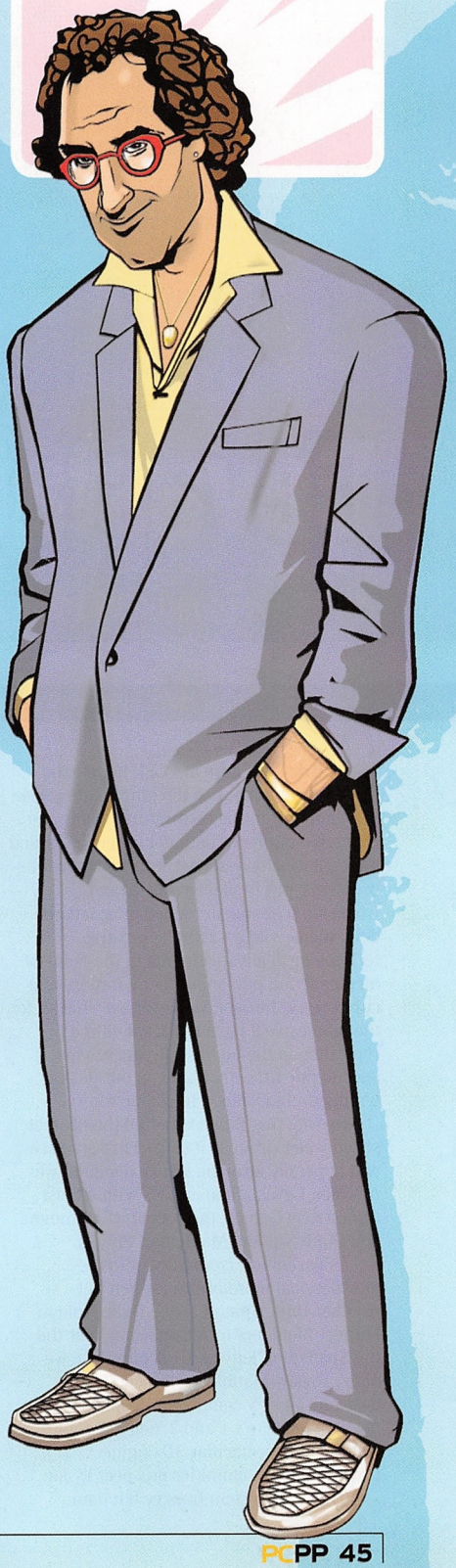
While on the topic of sound, if all that music and themed radio stations get to you during the 100+ hours of gameplay then just switch to the songs of your choice. Rockstar North plans to let players tune into their personal MP3 player



The Don had... changed

Into the Interior

In GTA3, the only interiors you could play in were simple showrooms you crashed your car through or an open-air multi-story carpark.
Vice City will feature 60 interiors, including a large shopping centre which will have rooms within rooms. Players can enter police stations, hotels, check the babes dancing at the local nightclub, see their reflection in the polished floors and even run amok in the local airport. Once inside, they can look out of the room and see streetlights turning on or watch the world go by. Players can get a feel for Vice City, inside and out.













Happy Days: The Next Generation?

Devastation

Where new teamplay modes take the sting off the Apocalypse



Developer: Digitalo ■ **Publisher:** Arush ■ **Distributor:** Manaccom ■ **Available:** Q1 2003

One day, we here at PCPP hope to be able to announce the imminent release of a game set in the near future, where the concerted efforts of national government and big business have solved our environmental problems, put in place realistic and workable schemes to reduce international debt, made wild and wholly positive technological advancements in the fields of medicine and personal transportation, and cured world hunger. However, as we wait for that game, we'll have to pass the time reporting on the endless stream of post-apocalyptic titles that land on our desks wrapped innocuously in plastic film.

Tossing that film easily into the nearest storm-water drain so it can wash out to sea and hopefully strangle a fairy penguin, we revealed Devastation, an FPS-with-a-twist from Arush Games, the people who brought you Duke Nukem: Manhattan Project.

As part of our commitment to the international moratorium against Yet Another Duke Spinoff While Duke Nukem Forever Moulders in A Cupboard Near the Big Spa Full of Jelly at 3D Realms HQ, we didn't review Manhattan Project. It was basically a fairly competent 2D-platormer in the vein of Duke's 1 and 2, delivered via a solid but unspectacular 3D engine. Devastation is a chunkier prospect by far.

Using the system-hungry but damn attractive Unreal Warfare engine, the game is, as subtly hinted above, a post-apocalyptic shooter set in the near future, where rampant consumerism and profit for profit's sake have erased polite society leaving only asylums, burnt out ghettos and the occasional oil tanker full of high-tech medical equipment. An evil megacorporation crushes the survivors of an unspecified disaster under its galvanised rubber boots, and endless cohorts of black-shirted muscle boys stream through the streets setting up inexplicable pumping stations and shooting anything that moves.

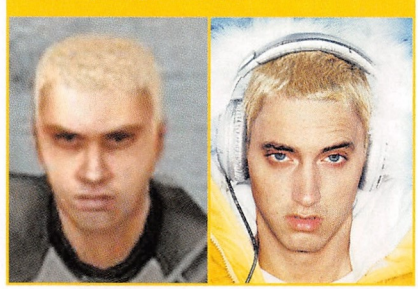
Apocalypse #326

Devastation's visual style combines the fanciful with the realistic - the situation may be Last Prayer of the Roller Boys material, but the locations are highly detailed recreations of an ivory tower socialist's worst urban nightmare. Neons flicker, 'trash' litters the streets, the asylum in the early part of the game is full of wheelchairs and drip stands, coffee vendors and the machine that goes 'bing'. Indeed, in keeping with the near-future scenario, the only immediately unfamiliar objects in the game are the cars, which are suitably insect-like in their ultra-aerodynamic styling. Fortunately, if this almost retro-futuristic vision of late 21st Century motoring offends, the cars, like many other objects, can be blown up with a few well-placed bullets.

Into all of this wanders our hero on a death-or-glory mission to topple the evil megacorporation, shoot an even gross of black-shirted muscle boys, discover new nanotechnologies and finally convince the real Slim Shady to please stand up (see boxout). Unlike most FPS games currently on shelves, he doesn't have to ride alone. Devastation features sidekicks, AI-controlled bots that can be ordered around from an as yet fairly limited menu of commands. Once the game is complete, it will be possible for the

EMINEM'S NEW ROLE

Back in PCPP#84, Inbox, From the Forums, we published a debate in which the usual suspects on the PCPP website (www.pcpowerplay.com.au/forums) argued that recent clues in the popular press pointed to new millennium shock-rocker Eminem being cast as J C Denton in the inevitable Deus Ex film treatment. However, after playing an early preview build of Devastation, PCPP can now reveal that Eminem's next role is clearly as the chief protagonist of this run-and-gun spectacular. Not convinced? Perhaps the following images will assist.







Why isn't anyone ever pleased to see us?





player to order sidekicks to do a variety of things, from circling around the enemy to pin them down to making a last-ditch suicide charge, and all the way to simply hiding. The inclusion of sidekicks should help create a sense of a living world full of actual people, rather than the typical FPS experience of being one man against an endless horde of faceless automatons.

No morons

Speaking of the automatons, our build of Devastation had only limited enemy AI, but Digitalo promises considerable improvements before the game ships in the next couple of months. The AI will be able to duck for cover, flank the player, choose appropriate weapons for a particular engagement and of course run away to find reinforcements. The AI team will similarly be able to respond to a variety of battlefield conditions, so those players who don't want to have to constantly shout over a communications link for their sidekicks to please shoot back, will be well looked after.



Most intriguingly, Digitalo promises a new form of singleplayer campaign. Roughly halfway through the traditional mostly-linear campaign, the gameplay dynamic will change profoundly to embrace Digitalo's new multiplayer mode called Territories. This is a curious hybrid of Capture the Flag, Team Fortress and Last Man Standing.

It works like this: on being fragged, players will return to spawn-points within their base, as per every single multiplayer FPS currently available. However, these spawn-points are destructible, so the aim of the scenario becomes domination of an enemy base and destruction of these spawn-points. Not only will this mode be offered in multiplayer, as mentioned above it will also form the core of the later part of the singleplayer campaign. How can this be? Let's just say our plucky heroes come into possession of some useful technology that makes such a scenario plausible.

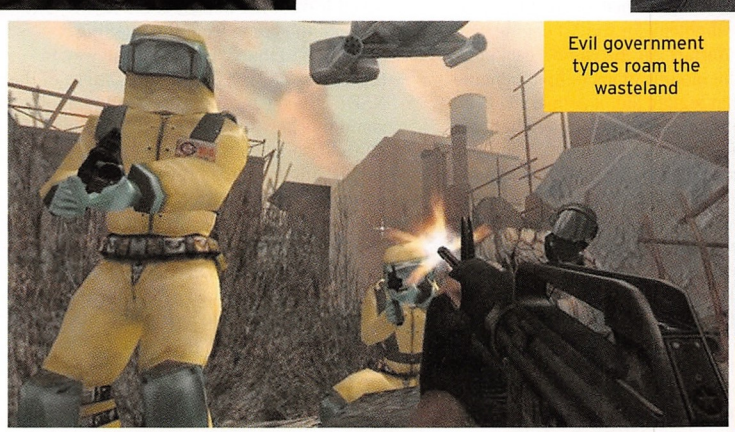
Devastation is a self-professed labour of love on the part of Digitalo, and has received little hype and likewise little marketing budget from its various publishers and distributors. However, when terms like 'sleeper hit' are bandied about by usually tight-lipped individuals with many years experience in the savage critique of videogames, we can't help but keep a watchful eye on Devastation. Who knows, it could be the next big thing at your local LAN. Expect a review in the next couple of issues, barring Duke Nukem-style setbacks. When it's done indeed. Cuh!

Justin Hoffman

ANIMAL CRUELTY

As a rat owner I did not share the glee expressed by other media providers at a recent Devastation press gathering when developer Digitalo demonstrated the rat drone weapon. This is basically a sweet, intelligent, highly-trained rat with a cube of C4 strapped to her back and electrodes implanted in her brain. Through the magic of TECHNOLOGY the player is able to take control of this poor creature, guide her through normally inaccessible areas and then, on pressing the red button, blow her (and any nearby enemies) to smithereens. That the rat with the bomb on her back has a cute little face and thoughtful brown eyes only makes this perversity so much more traumatic to witness. Now hand me another - there's still a few bad guys over by the incinerators.

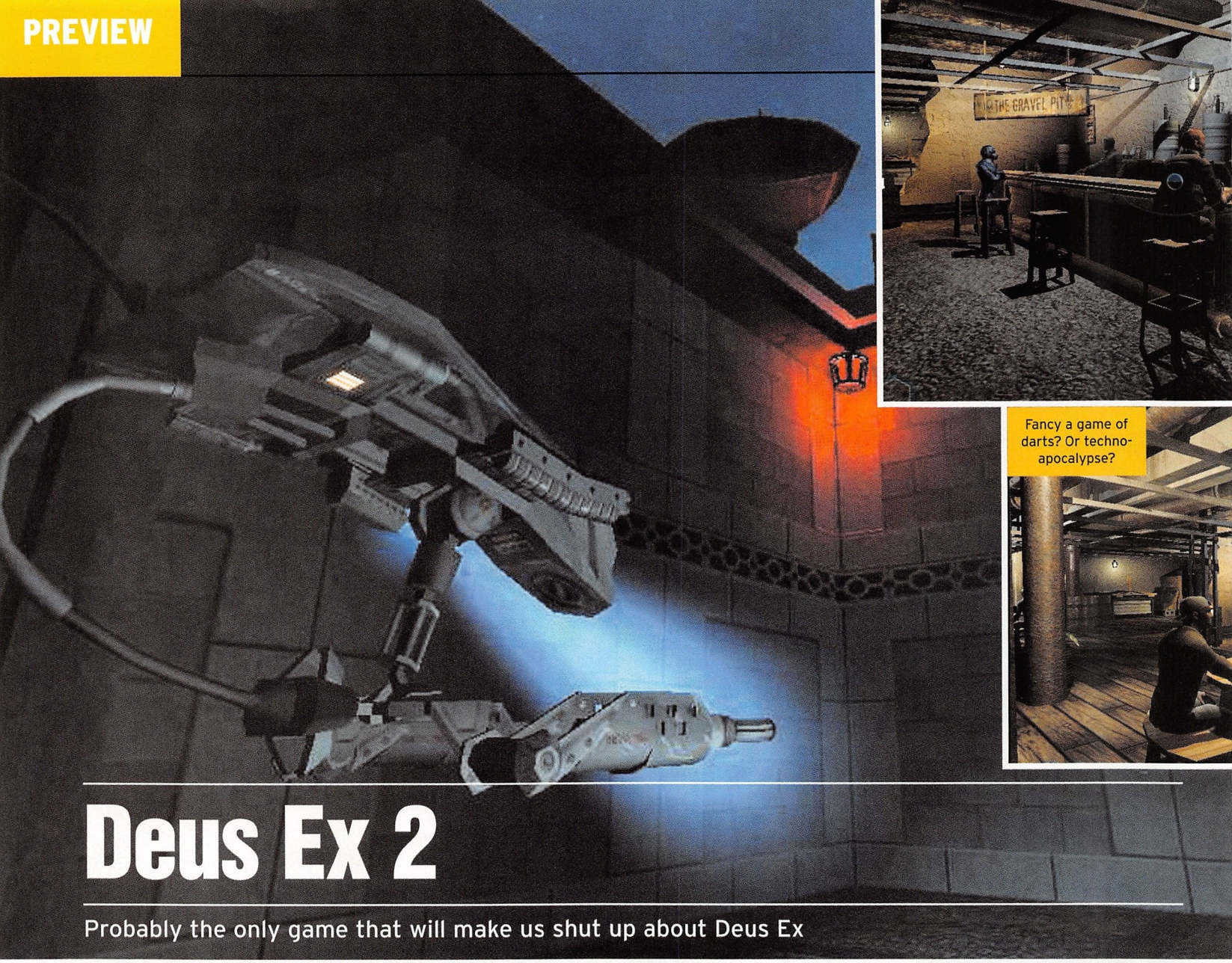




Evil government types roam the wasteland



Even your girl has the body of a hardened killer

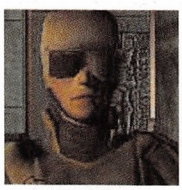


Fancy a game of darts? Or techno-apocalypse?

Deus Ex 2

Probably the only game that will make us shut up about Deus Ex

Developer: Ion Storm Austin ■ **Publisher:** Eidos ■ **Distributor:** Infogrames ■ **Available:** Q3 2003







Even though the game was announced in 2001, we haven't done a Deus Ex 2 update preview since PCPP#76. We wanted to wait until at least a few new screenshots were released and we'd managed to find out a little bit more about the game. Well, now we have and here it is.

For those readers who have been living under a rock in a cave, the original Deus Ex (released 2000) swept then-editor David Wildgoose and most of the PCPP staffers clean off their feet with a unique combination of FPS, RPG and a storyline that was almost worth turning into an actual book or TV series. Deus Ex was the first game where people could have conversations not about "have you got up to that bit yet" but rather "what method did you use to get up to that bit?" It was a game about choice, offering us numerous different solutions to each challenge, cleverly simulating freeform gameplay in a linear world.

Real characters, memorable moments, rich memories and a desire to have just one more run through to see if we could provoke a different response from the various NPCs, these were all the things that defined Deus Ex.

Enemy AI now has a far more complex set of behaviours and has programmed reactions to different elements of the game world

In other words

So we expect big things from the sequel. Very big things indeed. The original had plenty of flaws; moronic AI, a fairly basic 3D engine, limitations in dialogue and a poorly implemented stealth aspect. Deus Ex 2 seeks to address these problems and aims to provide a gameplay experience every bit as revolutionary and different as its predecessor.

Ion Storm has once again stuck with Epic's technology for the 3D engine, using Unreal Warfare for the game's backbone. As usual, the modifications to Epic's engine have been legion, but of primary concern has been the implementation of better indoor environments and dynamic shadows. Ion Storm believes it is now much more knowledgeable about 3D, and the, at times, repetitive and simplistic environments of Deus Ex will not pester the sequel.

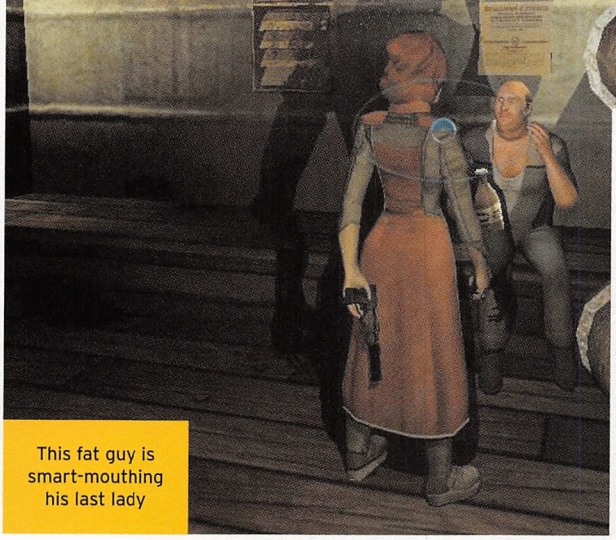
In fact, light is a key element in the new game. The biggest criticism levelled at the original was its inconsistent stealth aspects. It was always very difficult to determine when J C Denton was in shadow or exposed to enemies. Ion Storm has spent considerable time implementing dynamic shadows in Deux Ex 2, and at recent press demonstrations proudly showed off an underground environment and a guard using a torch. The enemy AI was able to detect the player only when they were inside the beam of the torch. With this capability, Ion Storm promises a detailed stealth element to the game, drawing on its experience with the Thief series to create a new definition of the term 'sneak-em-up'.

Smart cookie

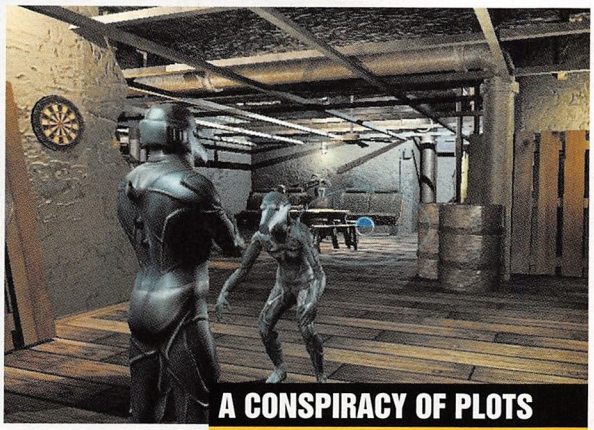
It was only Deus Ex's clever writing that saved it from the dearth of enemy AI that plagued the game from the opening mission on Liberty Island all the way to the depths of Area 51. The operatives of the NSF or the dastardly MIBs would happily stand by chewing the cud while JC picked off their colleagues one by one with a sniper rifle from the other side of the map. Added to limited character animations, this created at a times plastic feeling world, populated only by mannequins and freaky cyberpunk Barbie dolls.

Enemy AI now has a far more complex set of behaviours, and has programmed reactions to different elements of the game world. It is by layering these reactions that creates more complex and realistic AI response.





This fat guy is smart-mouthing his last lady











For instance, if the player uses a flamethrower to set a bunch of rats on fire, and these rats then squeal fleeing into a region populated by enemy units, these units will notice the rats and also notice the fire and combine the two programmed responses into a rat-evasion, fire-evasion combo that should provoke a number of interesting results. As situations become progressively more complex, this layered AI will be able to adapt accordingly. It's once more an example of what Ion Storm does best: building simple concepts into a more complex whole that results in better gaming for us.

Also, NPCs will be able to talk to each other (and the player will be able to overhear), react to each other's statements, and dynamically choose from a branching conversation web of more than 30,000 lines of dialogue.

Anyone who ever toyed with the DXEditor will have encountered AI 'barks', or single lines of dialogue delivered by NPC passers-by. These have been considerably beefed to be more reactive to the player's actions and the general situation in the environment. All this AI tweaking has been designed to further the illusion of a living world outside of, and beyond, the player's experience.

It's a small world

In a market plagued by the 'ten hour wonder' - a game that can be completed in one marathon sitting - it seems odd that Ion Storm should believe it had too many missions in the original Deus Ex. True, DX1 was somewhat longer than the average RPG; not as epic as Baldur's Gate but certainly bigger than the likes of Planescape Torment and Icewind Dale 2.

However, feedback from players showed that there was a considerable contingent of dedicated DX1 players who simply never found the time to complete the game. Ion Storm determined that gamers no longer have 80+ hours to invest in a title and have adjusted Deus Ex 2's length accordingly.

Rest assured though, the variety of locations seen in the original will not be cut back. Ion Storm promises missions set in Cairo, Seattle, Antarctica and more, and will feature even more detail in each location. Hundreds of items, dozens of NPCs, and of course those signature side missions adjacent to the main plot.

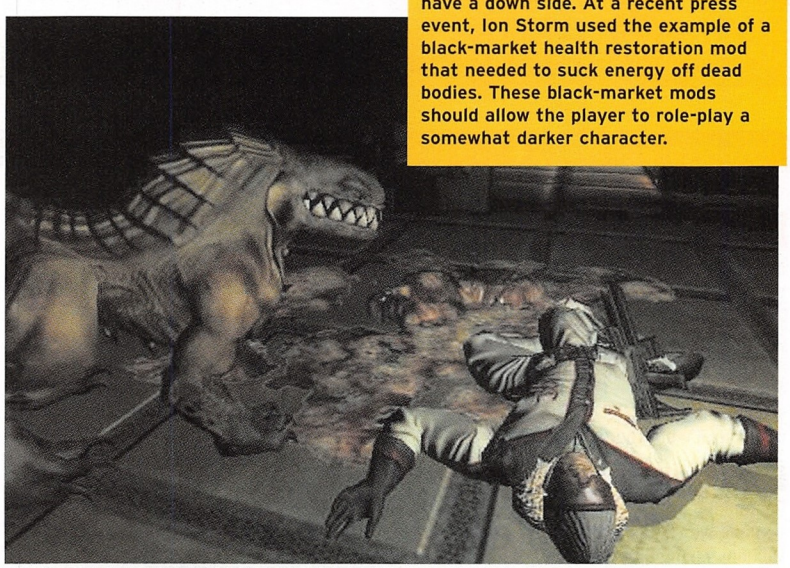
The long wait

When Deus Ex was first released, it surpassed all expectations of what an FPS could deliver. Its design and execution was so adroit, we were able to overlook the basic graphics and the lacklustre AI. As this game develops from considerable advancements in 3D technology, an overhauled enemy intelligence system and the opportunity to implement all the ideas that had to be left out of the original, Deus Ex 2 is full of possibility. Let's hope Ion Storm is able to deliver, later this year.

A CONSPIRACY OF PLOTS

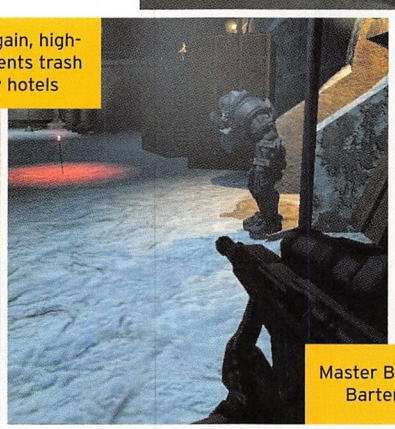
It's twenty years since the events of Deus Ex. While Ion Storm is staying tight-lipped about which of DX1's three endings will serve as the launch-point for DX2, we can reveal that the scientific conglomerate responsible for the creation of Paul and J C Denton has flourished in the chaos following Bob Page's defeat at Area 51. Further advancements in the human augmentation program have created Alex Denton, spawned from the same vat as his brothers but a far more complex cookie indeed.

Ion Storm has disposed of the skills system of the original game, as it was too arbitrary and, as the developer puts it, tweaky. Instead, a second tier of augmentations has been created, called bio-mods. These directly and permanently affect Alex's performance, from strength and speed to jump height and health. What's more, it will be possible not only to acquire bio-mods from official sources, but also special black-market bio-mods. While these black-market upgrades may have a more dramatic effect, they will also have a down side. At a recent press event, Ion Storm used the example of a black-market health restoration mod that needed to suck energy off dead bodies. These black-market mods should allow the player to role-play a somewhat darker character.





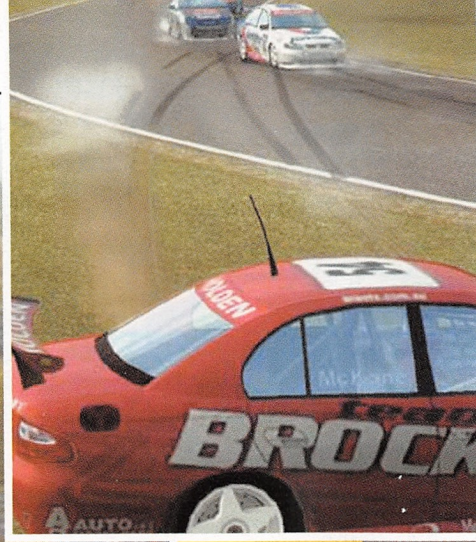
Once again, high-tech agents trash divey hotels

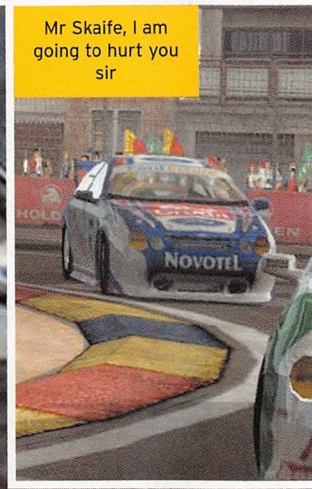




Master Blaster run Bartertown?







Mr Skaife, I am going to hurt you sir

V8 SuperCars

Gentlemen, start your engines

Developer: Codemasters ■ **Publisher:** Codemasters ■ **Distributor:** Infogrames ■ **Available:** Q1 2003

V8 SuperCars Race Driver is Codemasters' latest, greatest, much hyped and much anticipated follow up to the now famous TOCA Touring car console games. V8 SuperCars is the generic name of the game, which has been modified for sale around the world. In Australia it's V8 SuperCars, in Great Britain it's the TOCA series, and in the US the stock cars determine what the title is called.

Holden vs Ford

Personally, I think Australians have the best version, which has thundering Fords and Holdens racing around legendary tracks such as Sandown, Bathurst and Phillip Island. Maybe that's just patriotic bias, but I'm sure even the most haughty foreign racing team is bound to grab an eyeful when our home grown V8s rumble around the Melbourne Grand Prix circuit and the Gold Coast Indy track. Unfortunately, the new Ford and Holden models are not included in the game, but it still features the AU and the VX. Still, V8 SuperCars is a much-anticipated release, and judging by the preview copy, much of the hype is well justified.

The player assumes the role of aspiring racing driver, Ryan McKane, who can progress through multiple seasons like a real-life racing driver. This career mode is an unique feature in V8 SuperCars that sets it apart from others in its genre. You are also able to pick up new rides, earn money and swap and change through different racing codes, as seen in the Touring Car series and GT series. This will be a much-anticipated addition to the racing genre, as online fans of both Papyrus' NASCAR Racing series and Geoff Crammond's F1 games have prayed for an added career mode to the games, but so far have been ignored. Codemasters has taken the bold step forward and pushed the boundaries of the racing genre with V8 SuperCars - and it's sure to show in the finished product.

Meet Mr. Hothead

As momentous as the inclusion is, there are, however, downsides to it. Namely, being stuck with having to role-play McKane. Firstly, he's not a very likeable guy and the preview copy often had me wishing he'd push his cyber-head out of the window and get slammed. Of course, this is just Codemasters' attempt to build a convincing character, but some players may not appreciate McKane's big mouth and find that it really lessens the impact of role-playing. Unless you are an arrogant hothead yourself, being restricted to his conceited character is a frustrating experience. Unltimately, you will find yourself moving through, not your career, but guiding Ryan McKane's.

Another minor criticism of the career mode is that all the cut-scenes will feature predominantly American and English accents. If there's one thing worse than playing a fathead, it's playing an American fathead in a true blue Australian sport. It's doubtful that the final version will see McKane dubbed as an Aussie, but we can keep our fingers crossed. Despite McKane's sharp tongue and Yankee accent, the career mode will still make a terrific addition to the game.

Thundering Fords and Holdens racing around Sandown, Bathurst and Phillip Island!









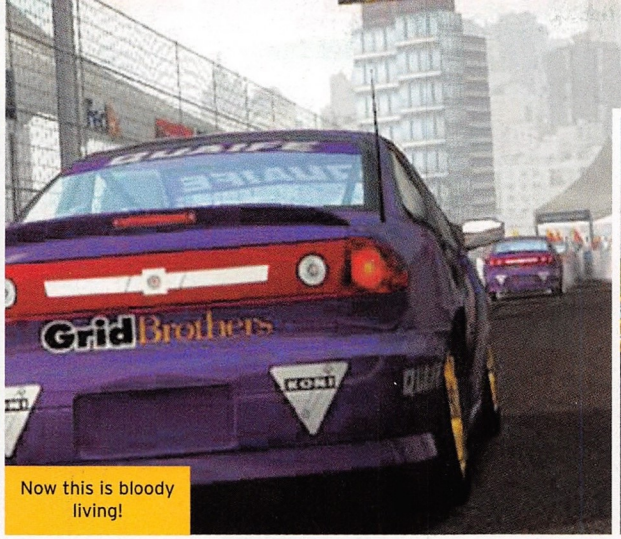
First things first

As an aspiring race driver, you won't be plonked into a seven hundred horsepower V8 SuperCar straight away! You'll have to earn your stripes first, and that means racing in a variety of lower order events. Unfortunately, the Formula Fords, which is a breeding ground for real V8 SuperCar drivers, will not be represented in the game.

Bathurst, here we come!

V8 SuperCars will come packed with an impressive amount of tracks which, in the





Now this is bloody living!





DAYS OF THUNDER RIDES AGAIN

Right from the start, obvious parallel's can be drawn between V8 SuperCars and the film, "Days of Thunder". Even Ryan McKane's firebrand character is suspiciously similar to Tom Cruise's character, Cole Trickle. Both come from open wheelers, are arrogant, of comparable appearance, and both head to closed circuit V8 sedan racing. Interestingly, in the US version, Ryan McKane goes straight to NASCAR racing, just like Cole Trickle. To draw even further parallels, at the start of the game, Ryan McKane's father is killed in a horrific accident much like Days Of Thunder's character, Buddy.







preview version, included most of the major Australian V8 circuits except, regrettably, the Melbourne Formula One circuit and the Gold Coast Indy. On a brighter note, V8 SuperCars is going to boast what is, by far, the best modelled Bathurst track yet. The famous Mount Panorama circuit is featured in EA's V8 Supercar game as well as Dick Johnson's forgettable racing attempt, but neither has brought it to life as accurately as the V8 SuperCars preview.

The game will also feature globally famous tracks, such as Donington and Silverstone in the UK. Aside from the large selection of tracks, the game offers a hefty assortment of racing cars each with its own unique physics, sound effects and cockpit graphics. As expected, the engine noises will be distinctly different for each type of car - so count on hearing those V8's growl!

Fun physics

In the preview, the physics is vastly superior to what we've been presented with in other arcade racers such as Hot Pursuit 2 and Midtown Madness. While developers should aim for realism when developing racing games, hardcore simulations really only appeal to a niche market of devoted race-sim gamers, and it's clear that V8 SuperCars is obviously targeting at mass appeal. In any racing game, arcade or simulation, it's important the physics engine be at least believable. After that, the amount of simulation-type realism is left up to the style of game. Using this realism marker, V8 SuperCars falls into the "arcade" basket, but not to the detriment of its physics.

The engine will allow you to operate fun stuff, such as burnouts, donuts, spins, fishtailing and massive crashes, without the complexity associated with realistic car set-ups, strict driving lines, and an unforgiving damage model. Typical of most console ports (V8 SuperCars was first released on Xbox and Play station 2), this is a driving game that can easily be played with the keyboard and will feature a very lenient learning curve.

Promising an awesome choice of tracks and vehicles, the inlcusion of a career mode, great graphics and sound effects, and one of the best arcade physics engines to grace the PC, Codemasters' V8 SuperCars will be an impressive title and certainly one to watch out for in 2003.

Victor Webster

SMASHING CARS HAS NEVER BEEN MORE FUN!

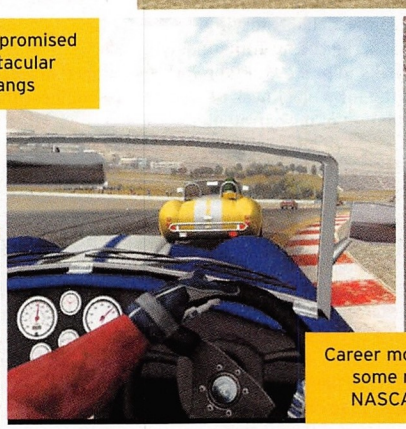
V8 SuperCars will feature Codemasters' much hyped new damage model. Although the actual effect of damage on your car's performance will be lenient, the visual effects are sure to look fantastic. Just as good, and maybe even better, than what we've seen in the NASCAR Racing sims. Glass will shatter, fibreglass will tear and metal will bend in what the developers have branded as one of the most spectacular damage systems to be seen on PC. Better still, the AI drivers will respond to your aggression and even have a yell at you after the race if you bang them up too much!

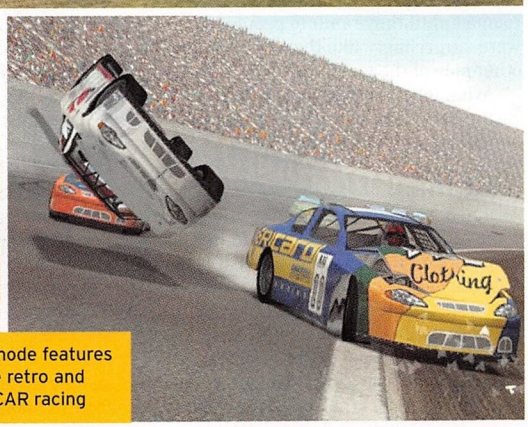




We are promised spectacular prangs







Career mode features some retro and NASCAR racing



Homeworld 2

An evolution based on a winning formula. Relic gets it right.

Developer: Relic ■ **Publisher:** Sierra ■ **Distributor:** Vivendi ■ **Available:** July 2003

The people of Kharak looked up into the stars and dreamed. If you were stuck on their ugly little planet - so hot you have to live at the poles - you'd look out longingly at the stars too.

However, one day, the people looked down and found the remains of an ancient spaceship. Apparently, the warring tribes of the dirt-bowl planet were not natives after all.

It was time to go home.

So the factions came together and built a massive Mothership to transport their people across the stars back to Hiigara. Through the emptiness of space they roamed until they ran into people who were surprisingly like them - but on the other side of the guns.

What followed were long battles with each other, many revelations and a homecoming queen.

New Dimensions

As a real-time strategy, Homeworld offered some unique elements above and beyond the dramatic storyline and the Battlestar Galatica base.

Firstly, players carried all of their remaining forces between missions making every ship feel like family.

Secondly, it introduced the world to true 3D real-time strategy. Ships could move in any dimension and attack from left or right flanks as well as above and below. To help with the complexity of the space fighting the camera was locked to individual ships so you could see the world from a point out in space.

The combination of story-driven missions and innovative space combat made Homeworld a surprise hit and a winner at the Strategy Game of the Year Awards in 1999.

Homeworld 2, is a self-confessed evolution, not a revolution of this winning formula. The team at Relic has made important improvements to all the key areas of the game such as storyline, variety of spacecraft, beautifully updated graphics, tweaks to make you more at home out in the inky blackness of space, and a constellation of new strategies.

New Troubles

One hundred years after the Mothership completed its journey home, Homeworld 2 begins. Everything appears to go along swimmingly until the pissed-off warrior race enters the equation.

The Vaygr have come to cause a ruckus, and while in the first game both sides possessed very similar technology, the Vaygr and the Hiigara are light years apart - in fact, their technology is so different that each faction gets a headache just trying to reverse engineer the other's Allan keys.

Unlike the first game, Homeworld 2 promises two very different sets of ships with the Hiigara favouring sleek multi-purpose vessels while the Vaygr preferring the more brutal-looking and blunt specialist starships.

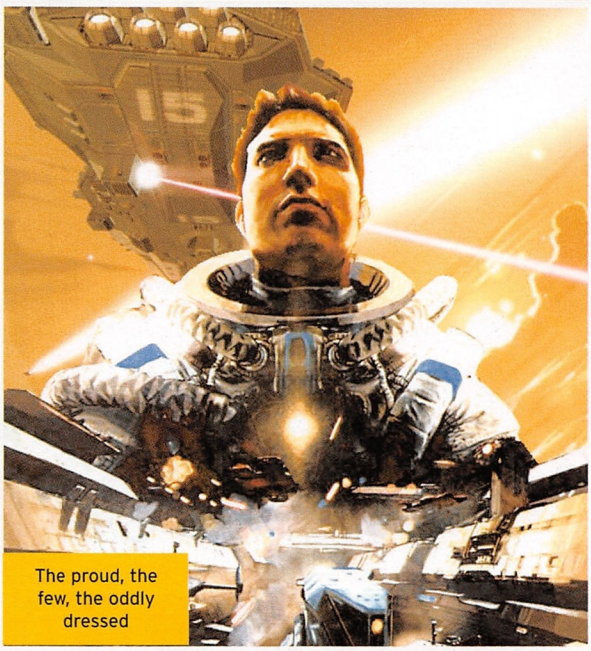
Relic is still keeping a lid on the main storyline behind the game, but they have let several snippets slip, such as finally finding out why the people from the first game were exiled in the first place, how Hyperspace got linked to our space, and who the Bentusi are and why they keep popping up in the game.

STRIKE FORCE

To help players handle the complexities of 3D space combat, specialist attack ships and arcs of fire, Relic has decided that players would need more than just being able to group units or place them in simple formations.
Strike Forces allows you to delegate a set of roles to groups of ships as either the core, escort, or flanking unit. This lets you move groups of Capital ships and have them surrounded by Corvettes with fighters in the outer ring to provide maximum offensive power or defensive protection for the whole group.
You can set any ships to any roles, so, for example, you can have corvettes and capital ships escorting fighter squadrons to get them into range to strike at a Carrier's key sub-systems. Less fiddling, more strategy.







The proud, the few, the oddly dressed







You can bet your bottom dollar the Bentusi will end up saving Hiigara from the Vaygr invaders and whatever mysterious force that is driving them.

The designers say that while the first game was a one-way trip home, this time the whole galaxy is a stage.

New Paint Job

On this platform we'll seeing performers and their performances on a scale which puts the first Homeworld to shame.

If you thought the vision of fighters against the Mothership was impressive, you'll be blown away with Relic's massive space stations which are roughly three times the length and breadth of the Mothership, and also a mysterious Gate that promises to be truly enormous.

Plus you also have nebulas and space debris which act as galactic markers and tactical bottlenecks to make combat a little more interesting in the inky vastness.

Just looking at the screens here it's obvious that the graphics engine is new and filling the silent void with colour and detail.

Beyond attractiveness, the new graphics will also be more functional with updates to the interface and a GUI that can be collapsed or expanded to meet players' individual needs. This means you will no longer have to go into a build management screen to start constructing new ships and can keep your eyes on the exploding glorious action around you.

Relic has also simplified the control scheme by working in several conventions, such as standard RTS to its innovative combat model. There is also wider range of movement and perspective as you are able to pan the camera around the screen, and move ships horizontally and vertically with the right and left mouse buttons and the taskbar tells you exactly who you have selected and what duties they are performing.

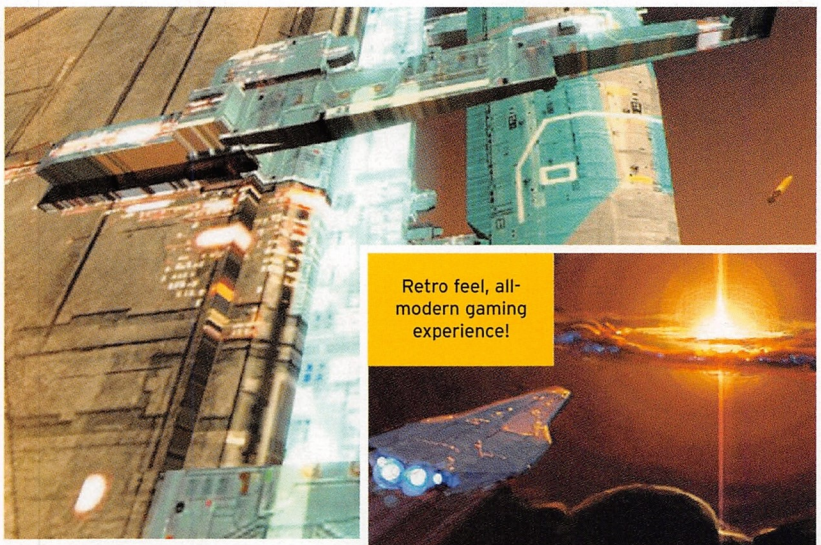
New Tactics

Tactics have also been greatly expanded with the inclusion of Sub-Systems. These give your Mothership, Carriers and Shipyards special abilities if you have the room and cash.

Some systems add to your targeting whilst another is a construction bay for building new craft and one more detects cloaked ships. However, only the Mothership can have all these upgrades, so players will have some hard choices ahead.

Another strategy is that you can target specific enemy sub-systems with smaller ships, such as bomber or fighter squadrons, which is effective in an X-Wing versus Deathstar kind of way. For example, someone can be flooding you with Corvettes, so your response may be to escort some fighters and destroy the enemy's Corvette construction bays to cripple its strategy.

The lesson here is bigger isn't always better - strategy and counter strategy is what it's all about.



Retro feel, all-modern gaming experience!

We're Home, Now What?

Homeworld 2 is looking like one of those rare sequels that nails the balance between innovation and keeping elements which made the original so popular.

Additions like tool support for the mod community (which produced Homeworld's Babylon 5, Star Trek and Star Wars mods without support) and up to six-person multiplayer options should do wonders for the game's longevity.

Relic has maintained the first game's outstanding dedication to the storyline about a tenacious and curious fleet that should keep its fans happy. Added refinements to the interface and control is bound to hook in a new generation of fans.

Now we just have to see if defending an empire can be as refreshing and desperate as a journey home.

Timothy C. Best





Nebula effects will now be even more elaborate!

FLYING YOUR COLOURS

As the game progresses and you carry fleet between missions, players will have the option to design their own logos and symbols to adorn their fleet - it's about inducing an emotional attachment for each ship.

Since it's possible for a player to either flood a mission with logo-plastered ships carried from the last mission or just scrape through - leaving you needing a total rebuild - Relic is scaling the difficulty of encounters to match the fleet you bring with you.

As a side effect, this means that each time you take on the 15-mission campaign you'll get different battles and tactical situations.



Nice weather for it.

Medieval: Viking Invasion

More big armies, more Total War goodness, now with horny helmets!

Developer: The Creative Assembly ■ **Publisher:** Activision ■ **Distributor:** Activision ■ **Available:** Now

The Total War: Viking Invasion expansion pack aims to deliver a few new units and factions for the broader European game as well as offer up a totally new campaign, the Norman conquest of England. This second component is potentially the most interesting, as you get to lead the ever amusing and terribly violent Viking hordes move and set camps from their frozen inhospitable Nordic wasteland to the more moderate and liveable climes of the British Isles.

As you'd expect from a game which was such a superb effort in the first place, there aren't any clever tweakery or major interface changes, so the expansion pack really offers up new units, new battles and a few minor changes here and there. Those who found defending in castle sieges frustrating will be pleased to note that you will now be able to brew up and toss boiling oil from parapets - the perfect way to make sure your guests know they are bloody-well not welcome.

There are also going to be a few major surprises like the weird medieval precursor to the machine gun, the Organ Gun, as well as many different types of fierce Viking warriors. The Vikings tend to focus more on offensive warriors (and we don't just mean on the nose) so many of their units are light on armour, but cause big damage and appear to be able to easily run down enemy formations. The Berserkers and Jomsvikings are particularly devastating, often doing well against mounted foes or superior enemy numbers. They can be a little hard to control, though, as they tend to get overzealous and go on a rampage forcing you to eschew any strategic plans you had for their involvement in the battle.

For obvious reasons, the Viking era technology tree will also be different to the other eras in the game, with a more simple and barbaric feel. Drinking halls and other dens of iniquity which keep your men happy and ready for war seem to be the focus here. Also, you will be able to lead the seemingly pitiful defence of the Britons against the horn blowing hordes with around seven Saxon tribes on offer. You can even command the Irish or Welsh.

The Britons in the Viking era will also have their own unique units. In a desperate attempt to stem the Viking invasion the Saxons will make use of their superior bowmen, the Sherwood Foresters. There will also be other unique units for each of the Saxon clans you can command.

The expansion pack will also deliver a new pre-battle organisation system which lets you have a snoop about looking for enemy forces as well as determining where your reinforcements should come from. This is a very good plan as you will be safer than guessing where your foes are coming from, which was all too often the case in Total War.

So, it looks like Total War fans will have one last bite of the Medieval cherry before the glory of Rome tempts them away.

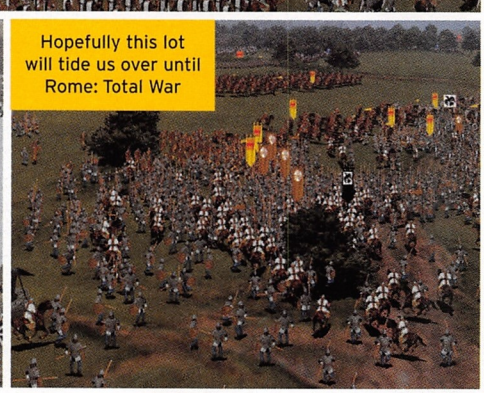
Steve Polak

SAME AS IT EVER WAS

At first look, the expansion pack appeared to have battles and a campaign that looked very similar; which had me assessing its potential value. However, the Viking era does have its own unique feel to it, as does commanding the Nordic hordes. There is less of a high tech approach and more in the way of unrestrained slaughter as you let loose fury-fuelled warriors. Fans of the Total War series will certainly find there is a need for an expansion pack to explain the strategic and tactical peculiarities associated with the Viking campaign. So, if you loved the original, and want another serving of slaughter stew then this additional portion will pique your interest - just don't expect a totally new dish.



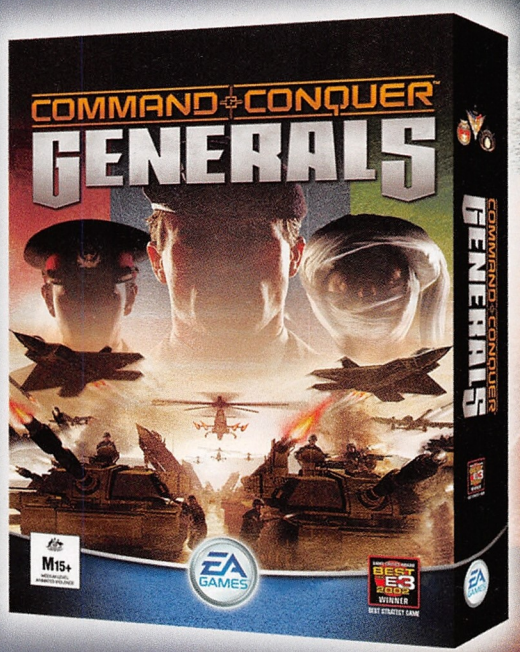




Hopefully this lot will tide us over until Rome: Total War

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They play Quake 3, Starcraft and Counter-Strike. Their full time job is gaming. They have skills that would make any weekend Q3A player weep. Some of them make as much money as Australian Cricketers and football players. They are the pro-gamers, and their numbers grow daily. **Asher Moses** straps on his bullet-proof microphone to take a look at what makes these top-tier players tick.



The Professionals

The rate at which competitive gaming has gone from small groups of gamers packed into Scout halls battling it out for the respect of their peers to professional international tournaments with cash prizes of over $US200,000 is simply astounding. Who'd a thunk that someone could earn any money at all from something that was originally created as a source of entertainment? A definitive example of gaming success can be seen in countries such as South Korea, where pro-gaming has really taken off, and some of the more elite players can earn more than $100,000 a year and have not only numerous fan clubs, but their own TV show segments as well!

Unfortunately, the same cannot be said for pro-gaming in Australia and many other parts of the world, with the biggest Australian tournaments only providing a few thousand dollars for winning teams and players. Before pro-gaming in Australia ever becomes a serious source of livelihood to a proud few, the sponsors with the big dollars have to starting taking it seriously.

To find out exactly where we are and where we are heading, we spoke to many of the top gamers in Australia to find out what it takes to be the best of the best.

Requirements

Unlike conventional sports, to be a pro-gamer you don't have to be fit, strong or physically agile at all. However, depending on the type of game you choose to play, you do have to have good hand-eye co-ordination (which improves with practice), fast reflexes and strong tactical thinking. Furthermore, like any other sport, those who put in the most time practicing and training eventually come out on top.

Many of the top gamers in Australia and around the world spend a similar amount of time practicing as any other athlete. It's not uncommon for teams to practice every day of the week, sometimes for eight hours a day or longer prior to major tournaments. Some of you may feel that this is extreme; however, anything less often results in great disappointment for both players and their fans.

What's more, the same games don't stay around forever. Just like Doom and Quake became obsolete, so too will Counter-Strike, UT2003 and Quake 3 Arena. Thus, gamers are required to continually move with the industry, adapting to the newer games or risk fading into oblivion. As you can imagine, it's quite difficult migrating from one game to something totally different, which in most cases can be compared to a professional cricket player moving to a game like baseball.

A spectator sport?

Currently, one of the largest problems facing pro-gaming today is the fact that, at this point in time, the vast majority of non-gamers are likely to be either uninterested in even the largest gaming events, or unable to spectate due because they simply cannot follow the fast pace set by current games such as Quake 3 Arena and Unreal Tournament 2003. Thus, many tournament organizers choose teamplay oriented, and therefore less frenetically paced, games such as Counter-Strike in competition for main prizes so non-gamer spectators are able to follow the action. However, this is just a quick fix and not a solution. The dilemma could be corrected by having professional commentators at each event, discussing, evaluating and commenting on the game at hand.

Thankfully, unlike in the early days of pro-gaming, spectating does not involve people gathering around a single PC, bringing much unneeded pressure and distraction to the athlete. Rather, nearly all major tournaments feature massive wall-bound screens that allow just about anyone to view the action from whatever distance they like. However, what about those who are not attending the event?

Well, currently, the only way for people who do not attend is to view the action through either third-party downloadable movies created by attendees, or by demos taken by players during their games. At this point in time, this method is quite sufficient; however, the next logical step looks to be live television and internet broadcasts. Can you imagine turning on your TV to Channel 9 news and hearing Brian Henderson's replacement intone: "After a gruelling tournament, Queensland Counter-Strike team Naughty Kommandoz has just won the CPL championships"?

Sponsorship

Finally, possibly the most limiting factor currently facing the pro-gaming industry is a lack of sponsorship. From our recent discussions with players and teams from around the world, most have pointed out that many companies are not taking pro-gaming seriously enough, and thus simply laugh when they receive a sponsorship request from a team that isn't ranked at, or very close to, the best in the world. Furthermore, for many players it is impossible to even attend such competitions without first having sponsorship, thus landing them in quite a vicious cycle indeed.

That said, we feel that as professional gaming continues to hit the mainstream market, the majority of larger companies will realize the potential advertising benefits these tournaments can provide and in turn begin to pump more dollars into pro-gamers, whether they be ranked #1 or #100.

The CPL

For those of you that have been hiding under a rock for the past few years, the CPL, or Cyber-Athlete Professionals League, is the largest annual pro-gaming tournament currently running in North America and its founder, Angel Munoz, is regarded by many as the father of professional gaming. Angel has been running gaming competitions ever since the original Quake days and has consistently increased the CPL's prize pool which started with a few pieces of donated hardware at the first event and what is now a whopping $US200,000 to be given away at the CPL Summer 2003 event.

Currently, the CPL game lineup consists of Counter-Strike, Unreal Tournament 2003, and Team Fortress Classic, however, in the past they have used Quake 1, 2 and 3, Doom 2, Alien vs



The World Cyber Games is a serious business - thus the need for the Soundproof Booth!







Predator 2 and Midtown Madness 2. Furthermore, just as games continue to evolve, so will the CPL.

Munoz is very optimistic regarding the future of pro-gaming, and rightfully so considering how much he has built and promoted the industry. However, the fact that it is difficult for players who do not live in the USA to compete in the CPL still remains a serious issue, particularly as it is promoted as an international competition. In an attempt to rectify this, the CPL Summer 2003 event will feature a total of 32 berths, 12 of which will be given to countries outside of the USA. Although this tactic is much more favourable than past experiences, it still means that countries like Australia will get a maximum of only one or two berths regardless of how talented our players are.

World Cyber Games

The second major international gaming tournament currently taking place annually in Korea is the World Cyber Games. Unlike the CPL, WCG gives each country the chance to send a maximum of 15 players to compete, with the current game lineup being Counter-Strike, UT2003, Age of Empires 2 (but most likely soon to be replaced by Age of Mythology), Starcraft, Warcraft 3 and FIFA 2003. In our opinion, this is a much fairer way of doing things and is a similar method to that used by the Olympic games, albeit on a much smaller scale.

However, although each country is permitted to participate, only a select few actually do so because free flights and accommodation for players is only available to a select number of countries (more information is available at worldcybergames.com/national/). Although most of the larger nations are supported, there are still many countries that are not and are in no position to pay for their players' expenses, thus forcing them to miss out.

That said, this is likely to change once large corporations and the general public start taking pro-gaming more seriously and sponsor not only the top players, but also the mid and lower-level players. Currently, Samsung is the worldwide sponsor for WCG and arranges flights and accommodation for all players to and from the selected countries.

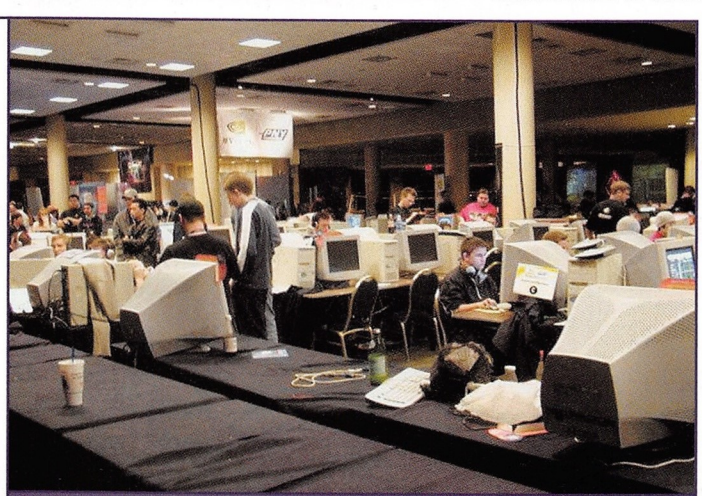
Qualification for WCG takes place at selected venues in each participating country. For example, in Australia, a large netcafe chain called iStarZone (www.istarzone.net) holds all WCG qualifications until players and teams are narrowed down to two or three per state. Finally, the remaining players then battle it out in their chosen games and the winning two from each are usually permitted entry to the tournament in Korea. Like the Olympics, it is certainly a tough process, but very rewarding if you get through.



One of the only events in the world where gamers get real media attention

PLAYING ONLINE

For those of you who happen to be living in a location that makes it impossible for you to attend LAN tournaments, there are a number of great online servers for Internet play. At the moment, the most popular of these seems to be Telstra's GameArena (games.telstra.com/gamearena), which features a number of competitive ladders for the most popular games including Counter-Strike, Battlefield 1942, Day of Defeat, and much more. Here teams compete in a well organized ladder that requires you to challenge and defend your position in order to move up to higher rankings. Of course, Telstra isn't the only provider for competitive game servers in Australia - iPGN, Optus, Pacific Internet, NetGamer, OzForces and many more provide reliable game servers, as well as most of the larger Internet service providers.


LANs continue to grow in popularity, and thus more pro-gamers are born

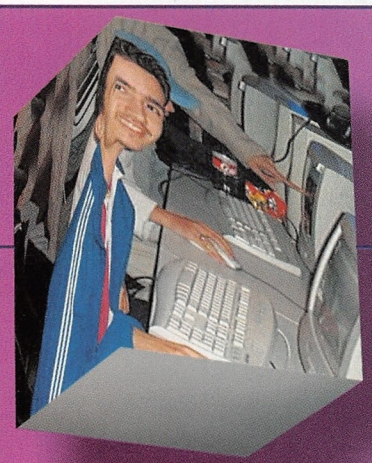
Which genre will dominate?

As far as competitive pro-gaming is concerned, we believe that the team-based FPS genre will continue to dominate for quite some time. This is simply because a relatively slow moving game like Warcraft 3 will not keep spectators entertained while frenetically-paced games such as Quake 3 Arena are generally too fast for spectators or even commentators to follow. In a team-based FPS, commentators can break down and discuss the tactics used by participating teams, as well as assess the competitive form players are in - just as in 'real' sport!

However, in a faster moving game such as Quake 3 Arena, you'd most likely hear the commentator repeating the same gaming calls time and time again: "<insert nickname here> was just fragged by his opponent". In our opinion, the tournament games of the future are likely to be determined by the level of entertainment they provide to spectators.

The players have their say!

Although the CPL and other tournament organizers are a very important factor in the advancement of pro-gaming, the real pioneers here are the players. We have interviewed three of the best gamers in Australia - nK.JackaL for Counter-Strike, IN.Kinnear for Warcraft 3, and Python for Quake 3. The reason these three titles were chosen was because these are the most common games played at current tournaments.



nK.JackaL: Hi, my name is Tim Brkan and I'm 18 years old. I live in Brisbane and I'm part of a team called Naughty Kommandoz or nK for short. We play a game called Counter-Strike, which I have been playing for over 1 and half years now. We have recently reached the status of number one team in Australia and I am very proud of them all.

IN.Kinnear: My name is Scott Kinnear and I'm aged 18 and live in Sydney. I started off playing Starcraft and then moved my way into Warcraft 3. My participation in the pro-gaming industry is starting to take off now that Warcraft 3 is in many major events this year. I hope to win WCG Australia this year and go to Korea to compete against the top players in the world. I will also play in the Ongamenet TV league (a TV station just for games in Korea) around July and if I make it I plan to stay in Korea for a while.

Python: My name is Andrew Cha Cha. I've been playing Quake 3 Arena since the test version of the game was released a few years ago on the Internet. I've been the #1 player in Quake 3 for the past three years in Australia and I've competed in a few tournaments overseas such as RazerCPL (finished equal 9th), BabbagesCPL (finished top 12), World Cyber Games Challenge (equal 5th), World Cyber Games 2001 and 2002 (both equal 5th).

PCPP: Do you believe that professional gaming has reached its peak? If not, what do you feel is left to accomplish and how long will this take?

nK.JackaL: I don't think professional gaming is even close to reaching its peak in Australia at this moment in time. Looking at a pro-gaming country like Korea where playing games like Starcraft: Brood War is a national sport and players have millions of fans is just amazing. A lot of things need to be done to come to that sort of standard - including better, faster and cheaper broadband; more sponsors to support events and teams; and finally, some of the gamers in our communities have to grow up and become more serious. They need to stop acting immature or doing things like cheating in these professional games. It really makes us take steps back instead of forward.

IN.Kinnear: Pro-Gaming in Korea is at its peak because so many companies are sponsoring players and both are making a profit. The sponsored players are earning more than $100,000 a year plus tourney winnings but in Australia it's impossible to get sponsorship by anything more than a Net Cafe or a free gaming server. Over time I believe Pro-Gaming in Australia will be a professional sport.

Python: In some ways it has but in others it hasn't. Internationally, some places such as Korea have hit their peak because they have players who are being paid more than above average wages, who are regulars on TV shows and also have their own fan clubs. Korea is further ahead than everyone around the world in this respect, especially when you consider that they have dedicated television channels just for professional gaming and also have professional teams that are sponsored by companies such as Samsung. Everywhere else in the world is way behind. However, some places are showing great potential in bringing professional gaming to their country, such as the Russians who have their government's support. Trying to get people involved with professional gaming isn't very easy as a lot of people view pro-gamers as people just playing games when, really, we have put a lot of effort into what we do and have seen the rewards of that. Australia is a very outdoor related country, we love our sports such as cricket, rugby et cetera and anything that isn't physically active like that gets put down pretty quickly. Hopefully attitudes in the future will change as professional gaming has only just started in the past few years and is beginning to pick up very quickly.

PCPP: What sort of preparation goes into training for a big tournament? On average, how often must you practice with and without your team in order to be the best you can be?

nK.JackaL: Well, that's a hard question, as every gamer will give you a different answer. I practice 2 to 3 times a week playing Counter-Strike for couple of hours just for my aim. I also watch a lot of demos from players all around the world for ideas on how to improve my game. We gather as a team in a Net Cafe called The Bunker (www.thebunker.com.au) where we have free playtime (sponsorship) around 2 to 3 times a week to practice our teamwork and come up with new strategies to outsmart our opponents.

IN.Kinnear: Preparation is very important in gaming for a big tournament you must put many hours into practicing so you are as close to your peak level as you can be when a tournament comes. In Korea they do on average 10 hours a day of practice to keep them selves at a peak level. Also being in a good mental state helps, a lot of games are based on clicking speed and out smarting your opponent by doing things they wouldn't normally expect you to do.

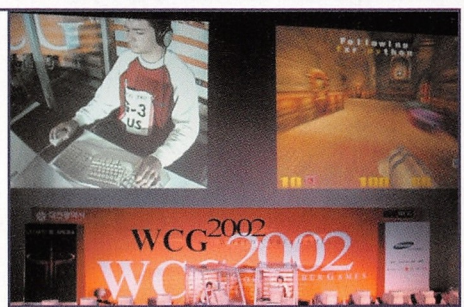
Python: For a big tournament I've generally been sticking to playing on the Internet. Although playing with a few people on LAN helps a lot as you can get used to playing on the same level as what will be played at the big tournaments. LANs tend to be more organised and have players who aren't going to leave games early and ruin things. Playing on LAN with a few people definitely helps before big tournaments. Having someone else's opinion helps as well because you get another perspective on how you are playing and what you can do that will benefit your gameplay. Also watching the latest demos of other international players can help by allowing you to see how they play and perhaps notice any kind of habits other they have so you can use them to your advantage if you play them in the tournament.

AUSSIE LANS

Although it is currently quite difficult for Australians to compete in international tournaments, there are still plenty of adequate Australian competitions for you to choose from. In NSW, the two largest LAN party events are Multiplayer United (www.mpu.com.au) and SGL (www.sgl.org.au), both of which offer great prizes including quite handsome sums of cash and a plethora of console and PC hardware. Similarly, Victoria and Queensland's major events, Shafted (www.shafted.com.au) and QGL (www.qgl.org) both offer great kit and experienced competition. Although significantly smaller than the other events listed, Tasmania, ACT and South Australia are host to the BFG LAN (www.bfglan.net/), ACTGN (actgn.com) and WonderLAN (wonderlan.sagamers.com) tournaments respectively.

Although these certainly aren't the only LAN events held in Australia, they are the largest in each state and are held without fail every month or so. An excellent website to regularly check for LAN competitions close to your hometown is AusGamers (www.ausgamers.com), which has a great Australian gaming community that will keep you in the loop for upcoming events.

As far as national tournaments are concerned, these are held occasionally. The most recent was The Big Day In (www.bigdayin.com), which consisted of around 1000 players and had a total prize pool of about $AUD7000, not including donated hardware from a mass of sponsors. Although the prize listing isn't as elaborate as that of the CPL, it is still a great place for you to pit your skill against the rest of the country.



They look nerdy, but they're really 133+

To the future!

The general consensus amongst players seems to be that the only country currently providing a sufficient environment for those wanting to make a living out of pro-gaming is South Korea, with Europe and America catching up slowly but Australia still quite far behind. That said, each year international tournaments continue to grow and, if the industry maintains the evolution Angel Munoz and other tournament organizers expect it to, then you can be sure to see many more players making a career out of pro-gaming in the not too distant future. Mark my words: somewhere down the track you WILL be sitting in front of the TV watching the CPL grand finals. It's only a matter of time.





LAST OF THE SUMMER WINE

17" Monitor PowerTest by **Jack Kulyk** and **Anthony Fordham**

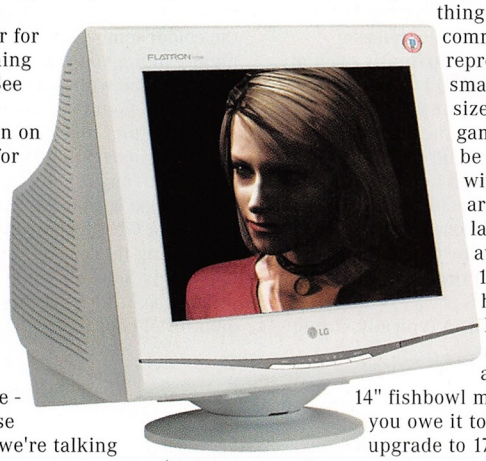
This is the last 17" CRT roundup that PC PowerPlay will ever do. It's a sad time, a time to look back with a sense of fond longing on a hardware institution that has formed the figurehead of any decent but modest gaming PC setup. The 17" CRT monitor, with a reasonable price point, good resolution capability and decent on-screen real estate was the mainstay of gaming culture for the best part of ten years.

Why all this doomsday talk? Well, the 17" CRT's days are numbered. LCD monitors are becoming cheaper, and their response times are improving dramatically, finally making them a serious contender for your gaming dollars. See our LCD showdown on page 99 for more details.

Of course, the concept of 'cheaper' is highly subjective - in the case of LCDs, we're talking 'cheaper' at a shade under $1000, which is still anywhere between $500 and $600 more expensive than a 17" CRT. And the CRT is mature technology; you can now expect to get a hold of a 17" monitor capable of 1600x1200 at a decent refresh rate, while even the more expensive LCDs are still only able to manage 1280x1024.

But the bottom line is that CRT is being phased out, slowly but surely. When we last did a 17" roundup, way back in PCPP#62, we were able to get a hold of 12 monitors from almost every major manufacturer in the world. This time, when we unrolled our crusty, coffee-stained contacts lists and pawed through our moth-eaten address books, we could only come up with five manufacturers still serious enough about 17" CRTs to send their bulky products to the PCPP offices. And of those five, one - Sony - told us they would soon be moving away from 17" CRT altogether, and we've only included the E230 because it's truly an excellent display that you should still be able to pick up around the traps.

The monitors in this tearfully short roundup range from the high-end to the extremely basic. They cater to all budgets and all sensibilities, but they do have one thing in common: they represent the smallest screen size any true gamer should be satisfied with. If you are still labouring away on a 15" or even - horror of horrors - some antediluvian 14" fishbowl monstrosity, you owe it to yourself to upgrade to 17".



In our opinion, the monitor is the single most important component in any gaming PC. It's expensive, it's heavy, and it's not something you want to be hauling out of your study every 10 months for an upgrade. It's a piece of furniture, and unlike almost every other single part of your PC is has the potential to last for 10 years. So your monitor investment should be a sound one, giving you a screen that will provide the primary point of contact with your gaming universe. Choose wisely. So, hopefully, this PowerTest, the last of its kind, will provide some sort of help.

HOW WE TESTED

The six monitors in this PowerTest were judged on performance and that performance was then compared with the asking price to come up with a score that reflects the overall investment value of each monitor. A higher score means you should seriously consider buying the product.

We used standard test pattern graphics to examine each monitor's ability to display colour and fine detail, and we subjected each screen to rigorous gaming tests in Quake 3, UT2003, C&C Generals and Age of Mythology to get the full gamut of potential PC graphics environments.

A final caveat - all of these monitors are on the brink of obsolescence. But that doesn't mean their performance is lacking in any way. But be aware - for 17" CRT, this is as good as it's ever going to get. From here on in, it's just dusty boxes in old warehouses, hoping against hope some nostalgic tightwad who can't afford a new LCD will come along and pick them out.

Sony
FD Trinitron E230

■ **Price:** $689 (occasionally listed at $600) ■ **Distributor:** TechBuy ■ **URL:** www.techbuy.com.au

Monitor aficionados are broadly split into two camps: Trinitron people, and people who aren't Trinitron people. Sony invented the Trinitron in the sixties, using a radically different form of CRT technology called Aperture Grille which provides not only a cleaner, crisper image, but vertical flatness in a world of fishbowl TVs and monitors.

These days of course, everyone has gone flat, and Sony has had its flat FD Trinitrons in the marketplace since 1999. Now entering its fourth year, Sony is starting to wind down the technology, dropping the 17" model from the new release schedule. And apparently even my beloved 19" G420 is destined, ultimately, for the chop.

To the E230 then, and this is a slightly lower end CRT than what we usually get a hold of from Sony. Indeed, the spectacular G220 has disappeared from Sony's official Australian website and the display seems almost impossible to find among dealers.

The E230 is a typically strong effort from Sony with a price tag to match. Trinitron tech is more than 40 years old now, and it shows in the simply far superior image that this monitor is able to provide. It's top resolution is 1600x1200 at 60Hz - nothing overly spectacular you might say. Sadly, this monitor is not capable of the 1024x768 at 100Hz that the G220 could provide, but at 85Hz this resolution will still be comfortable for the majority of users.

Sony has always provided extra on-screen controls when compared to some of its competitors, and the E230 is no exception. Most importantly, it's possible to define the colour temperature, so for late night gaming you can set the screen so the whites don't burn the eyes out of your ever-loving head.

The bottom line with the E230 though is image quality. It's superior to any other display of this size except the G220. If you can find a G220 get it - that's what I'm writing this on. But if the E230 is the only Sony option and the price is right for you, this is the monitor of choice.



PCPP Score

Damn expensive but sometimes you need to pay for quality. Lower spec than the discontinued G220, but still the best of this bunch

90

Samsung
SyncMaster 765MB

■ **Price:** $399 ■ **Distributor:** BenQ ■ **URL:** www.harristechnology.com.au

For a long time we espoused the Samsung 753DF flat screen 17" CRT as monitor of choice for the budget-conscious, offering damn fine performance at a lower price tag. So it was with some anticipation that we hooked out mitts into the 765MB, an even cheaper model hopefully benefiting from lower production costs and a few next technologies.

Were we disappointed? A little. This is no the king of the budget screens, though it is a more than adequate monitor. First up, it includes Samsung's new MagicBright technology, which is basically a dial on the front of the screen that lets you set brightness to text, internet or entertainment. Each setting is progressively brighter, and I actually found it quite useful because staring at a white document file late at night at full brightness is torture. To fix this, I usually have to fight through the arcane OSD of my 19" Sony G400 turn its colour temperature down to 5500k, so it's good to have a simple switch that can do this for you.

There's also a HighlightZone function similar to Philips' LightFrame technology (I'm going to drown in intercaps!) where you can highlight a section of the screen and have it brighten. This is good for 2D graphics work, I suppose, but it's a pretty irrelevant function for gamers. Fortunately, as the price would suggest, it doesn't seem to add much to total cost of ownership.

Beyond the techno gewgaws, the 765MB's actual performance is a little on the disappointing side. At high resolutions, above 1024x768, text is slightly difficult to read and very fine details blur and lose definition. This isn't really a problem in most games, but if you're running a Radeon 9700 you simply won't get the most out of the card's image quality abilities on this monitor.

Raw grunt is quite respectable though - like the Mitsubishi model, the top resolution is 1600x1200 at 60Hz and the monitor can run the elusive 1024x768 at 100Hz, which is just so solid and easy on the eyes.

So, the 765MB is not entirely what we were expecting from the company that brought us the 753DF, but it's still a decent monitor for what it's worth.



PCPP Score

An impressive set of specs, but disappointingly doesn't measure up in real-world performance. MagicBright technology is welcome spice, and for a good price this monitor is solid

81

BenQ
G774

■ **Price:** $290 ■ **Distributor:** BenQ ■ **URL:** www.benq.com.au

It's a shame that 17" CRTs are on the way out, because there are a few units out there that offer a damn fine performance for not too much money, and BenQ's G774 is a supreme example of that.

It forms part of BenQ's Graphics line of monitors and is one above it's lowest-tier Value line. Compared to cheaper screens, such as the V772, the G774 offers a 0.25 dot pitch, a maximum resolution of 1280x1024 at 67Hz and a decent anti-glare coating to cut down, well, glare.

This is a flat monitor but it uses Shadow Mask technology rather than the hybrid Shadow Mask and Aperture Grille tech seen in some other screens. This results in a slightly less vibrant and crisp image, but it has the advantage of not having the two tiny shadow lines found in Aperture Grille monitors.

The G774 offers a decent mix of resolutions at solid refresh rates - 800x600 runs at a very respectable 114Hz while 1024x768, likely to be your most common resolution, can manage 87Hz. Headaches and eyestrain, therefore, should not become a problem and naturally the G774 conforms to all emission regulations governing radiation levels. And the OSD controls are what you'd expect - just the basic adjusters for position, pincushion, brightness and contrast.

One curious thing about this monitor is that its very, very similar to Mitsubishi's venerable 1786FD. We noticed this back in our first 17" PowerTest in PCPP#62, when BenQ was still called Acer. It would appear that both monitors are manufactured in the same huge grey tech refinery, with each getting a custom fascia with different coloured buttons and badges.

Indeed, performance between the 1786FD and the G774 is so similar that only the price on the day will be the deciding point between the two. The Mitsubishi has a superior tube capable of a higher max resolution and slightly higher refresh rates, but with the G774 $50 to $100 cheaper, then it's probably worth going in this direction.

It's much of a muchness in the end, so here's hoping the two companies can differentiate themselves more effectively in the emerging LCD market.



PCPP Score

A decent chunk of performance for not a too significant a chunk of cash. If it had the same tube as the Mistubishi, but kept this price, it would be a winner

73

Mitsubishi
Diamondview 1786FD

■ **Price:** $549 (often listed at $310) ■ **Distributor:** Mitsubishi Australia ■ **URL:** www.mitsubishi-electric.com.au

On first examination this monitor appears almost identical to BenQ's G774. Only the front face seems to be different, and that's only in badging, a few little moulded bits and different coloured buttons. From this we assume both monitors are assembled in the same factory and some get turned into BenQs and other stay Mitsubishi.

Under the hood however, it's a slightly different story. While all controls and on-screen displays are the same as the BenQ, the 1786FD's tube actually performs better, capable of 1280x1024 at a very useable 75Hz and even 1600x1200 support at 60Hz.

While this extreme resolution is seldom likely to be used on a screen this size, it does mean that the lower resolutions will have higher refresh rates and less headache or eyestrain potential.

This monitor is an old favourite here at PCPP and has been used in our office in the last couple of years. It's bold and bright and the flat screen is easy to adjust and seems curiously immune to the random repositioning that affects some monitors at different resolutions.

Gaming on the 1786FD has always been a joy. Anti-glare coating on the screen makes it effective in a brightly lit room, but the monitor really comes into its own after dark, offering a rich graphical experience with deep blacks and well-defined highlights.

The 0.25 dot pitch hardly holds this screen up as the pinnacle of modern technology, but for the vast majority of games - especially if you're running an older system and you play more Diablo 2 than UT2003 - you won't even notice.

Like the BenQ, the 1786FD uses Shadow Mask screen technology so there aren't any shadow lines from the Aperture Grille support frame. Ultimately though, not having access to Aperture Grille keeps the 1786FD well below par when compared to the superior - and lasting - image quality of the, sadly, no longer available Sony.

This is a good monitor, well worthy of consideration, but make sure you get a bargain because with the RRP, the 1786FD is outstripped by newer and cheaper models.



PCPP Score

Nearly identical to the BenQ G774, but with a superior tube, the 1786FD is a mainstay of the 17" market. The RRP is starting to look unrealistic though, so seek a bargain

72

LG
Flatron 700B

■ **Price:** $399 (sometimes listed at $300) ■ **Distributor:** LG ■ **URL:** www.lg.com.au

Despite Sony's stranglehold on new display technology, LG actually managed to almost scoop the Japanese giant on the first flat CRT, back in 1999. The Flatron, on its release, was an excellent performer which offered capabilities nearly equal to the more expensive FD Trinitrons.

This latest Flatron forms part of LG's lower end of monitors, but it's good to see flat screen technology make it this far down the price ladder. The original 17" Flatron flaunted itself at the $550 price point, but this more modest model comes in down around $300, if you know where to look.

Maximum resolution is the standard 1280x1024 at 60Hz but on top of a 0.24 dot pitch this makes for quite a nice image indeed. Flatron's real strength is the clarity of its image - this is one crisp monitor and one of the few 17" models where running at a resolution above 1024x768 is actually plausible. It doesn't overtake the blistering clarity and precision of the Trinitron, but it's very close.

On-screen display controls are all standard, although LG's menu is a little more user-friendly than some of the frankly arcane stuff out there. It's not possible to set colour temperature, so late at night you may find yourself having to reach from the brightness button, that most indelicate of eye-preserving methodologies.

The 700B also has a refreshingly short picture tube, so this monitor takes up just that little bit less space than some of its contemporaries. Of course, saving space should hardly be a consideration when buying a CRT at this stage - you just want to lay down not too hefty a chunk of cash and not get too crappy a screen while you wait breathlessly for LCDs to come below both the 16ms response time and also the $800 price point.

However, at $300 (from the right supplier) the LG Flatron 700B is a performer and a worthy stop-gap display in the dying years of small CRT. Roll on LCD I say, and let's see what LG can conjure up in this exciting new arena.



PCPP Score

Good value if you can find it at $300, with decent performance to match. Still positioned as the budget-conscious man's Trinitron, Flatron remains worthy

86

LG
Studioworks 700S

■ **Price:** $349 (but usually listed at $240) ■ **Distributor:** Techbuy ■ **URL:** www.techbuy.com.au

First up, this monitor is a fishbowl - it has a curved front surface. But don't let that unduly dismay you, because this is a decent, cheap 17" display, especially when you consider that many of the online distributors are selling it damn cheap - one listed price I saw was a very enticing $240.

And why not, this is old school tech in every way. The dot pitch is only 0.27 so to the trained eye this monitor is going to look quite grainy indeed. It's the kind of thing we were using back in 1999, but there's a reason the technology in the 700S is still available today - and that's reliability.

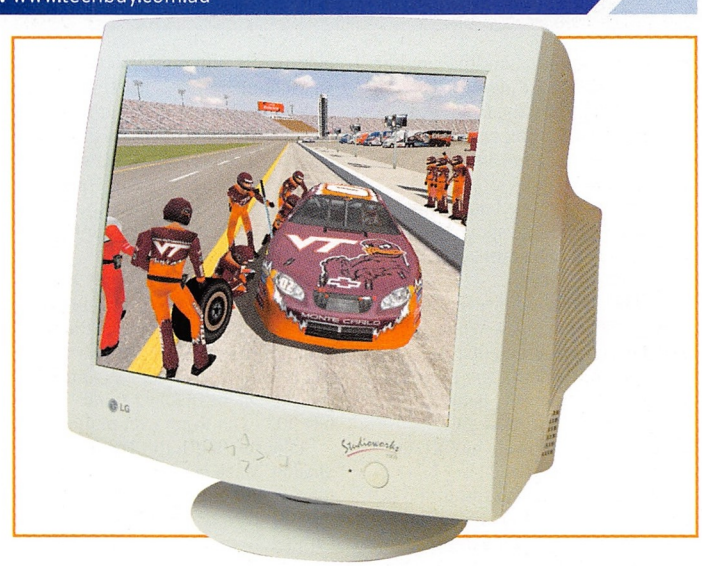
The monitor offers good colour, crisp tones and clean lines. The curse of the fishbowl design can be alleviated somewhat by a set of simple and intuitive OSD controls that allow you to alter the pincushion effect as well as other standard position adjustments.

Maximum resolution is a fairly standard 1280x1024, but only at 60Hz, so this monitor is bound to give you a headache if you stare at it for too long. Back down at 1024x768, a more respectable 85Hz is possible and on 17" of real estate, you're probably not going to want to exceed this resolution too often anyway.

Like the 700B, the 700S doesn't include any of the 'frills' associated with some more expensive monitors, such as a USB hub or second set of inputs. It's the kind of monitor you should be looking at if you only have 14" or 15" unit from the Upper Palaeolithic, and need that little bit extra space for not too many dollars.

Ultimately though, is it possible to recommend this LG monitors in the presence of such solid, flat performers as Samsung and Mistubishi? If you can find the 700S at the appropriate price, then the answer is, yes.

It'll hardly form the centrepiece of a gaming beast worthy of adulation by all at your next LAN, but it will work solidly and reliably for at least five years, by which time a fast gaming-worthy LCD should be available at a price point closer to the normal sane person's budget.



PCPP Score

Unspectacular, reliable and a solid performer with none of the extra frills. Not for extreme users, but good for modest gamers. Add 5 points if you can find it for $240 or less

69


JVC
ORGULLO VIKINGO
TODOS
A CIBELES
REAL MADRID C.F.
DIAMOND VIEW
DIAMOND TOUCH
For the serious gamer
MITSUBISHI
ELECTRIC
Mitsubishi Electric Australia Pty. Ltd. 348 Victoria Road, Rydalmere NSW 2116
Phone: (02) 9684 7777 Fax: (02) 9684 7208 www.mitsubishi-electric.com.au
FIFA 2003 images courtesy of Electronic Arts



WIDE OF THE MARK

3DMark03 - the future of benchmarking or just a horrible mistake?

FutureMark claims to provide the ultimate tool to determine the speed of your gaming PC. But is 3DMark03 really definitive? nVidia disagrees. Asher Moses examines the debate.

The recent release of 3DMark03 has sparked controversy in both online and offline communities - not only are hardware enthusiasts involved but manufacturers too are throwing themselves into the slugfest. The reason for this is simple. Over the past few years, FutureMark (formerly MadOnion) had developed their flagship graphics card benchmarking tool, 3DMark, from a small freeware utility used only by a selection of the most hardcore online hardware review websites, to the standard testing suite featured in almost every graphics card review published today. So naturally, when the new version of 3DMark was released, any problems with the tool were heard immediately.

Much of the discussion regarding 3DMark03 came from comments published by graphics card giant nVidia, which stated that 3DMark03's tests give little indication of performance in current games. This is quite a bold argument from nVidia, considering that the utility is labeled as "The Gamers' Benchmark" and is expected to give consumers an accurate indication as to how their system or future graphics card will perform in current games.

As 3DMark2001 is one of the main benchmarking programs used at PCPP Tech for some time now, we were quite concerned about these brutal claims of 3DMark03's weaknesses and unreliability. In order to determine if there is any truth behind nVidia's claims and therefore decide whether we would add it to our own benchmarking suite, we performed a relatively detailed test by test analysis of this handy piece of software. But first... FutureMark's main source of income comes from the sale of BETA testing memberships to performance hardware manufacturers, such as CPU builders Intel and AMD, GPU builders ATi and nVidia, other graphics card builders and OEMs. If one manufacturer were to cancel its membership, you can probably imagine the impact it would have on FutureMark's profits.

nVIDIA speaks out

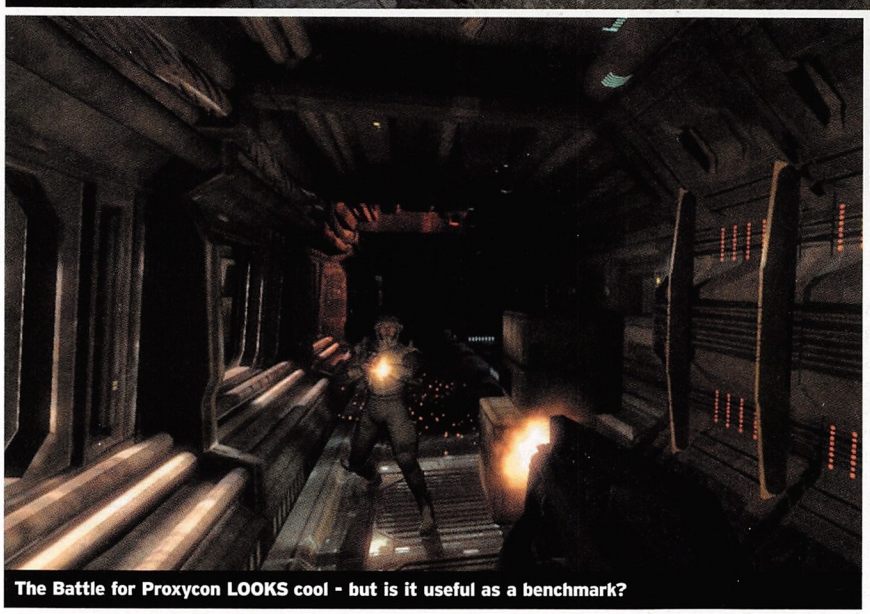
Unfortunately, nVidia did just that after a disagreement with FutureMark during the development stages of 3DMark03.

What drove nVidia to the point they would cease relations with FutureMark altogether? nVidia's argument is as follows:

"3DMark03 combines custom artwork with a custom rendering engine that creates a set of demo scenes that, while pretty, have very little to do with actual games."

nVidia's main complaint regarding 3DMark03 is that the tests performed give little indication of real-world performance in games. Although this is to be expected from any synthetic benchmark, nVidia makes valid points that go beyond the obvious downfalls of its synthetic nature. However, before we delve any further, it's important that you know exactly how 3DMark03 works. The benchmark is made up of four game tests, five feature tests, two CPU tests and three sound tests. The final score, however, is judged only on the game tests, which is worked out with the formula at the top of the next page:





The Battle for Proxycon LOOKS cool - but is it useful as a benchmark?

"No game would ever do this - the remainder of the engine never gets the opportunity to stretch its legs." *nVidia*

Score = (Test1FPS * 7.3) + (Test2FPS * 37) + (Test3FPS * 47.1) + (Test4FPS * 38.7)

Each game test is directed at different graphics sub-systems, adding up to give an overall analysis of your PC's graphics performance. However, it's the very nature of these tests that nVidia has problems with. The first test, dubbed "Wings of Fury", is a simple flight simulator demo featuring a low, single-textured polygon count, Vertex Shader 1.1, a meager 32,000 polygons per frame and, get this, uses the now superceded DirectX 7 API. Here's what nVidia has to say:

"Unfortunately, FutureMark chose a flight simulation scene for this test. This genre of games is not only a small fraction of the game market (approximately 1%), but utilizes a simplistic rendering style common to this genre. Further, the specific scene chosen is a high altitude flight simulation, which is indicative of only a small fraction of that 1%. For any given frame in the scene, up to 90% of the pixels in the frame are single textured. This occurs because the majority of the scene is the low poly-count, single textured "skybox", painted to look like sky and clouds."

False claims?

nVidia continues, "The documentation for 3DMark03 gives some detail about the four-layer multitexture used on the airplanes. Regrettably, all this effort is lost on the fact that the airplanes cover so few pixels on the screen to make these four layers of multitexture completely insignificant. Game Test 1 is, essentially, a single texture fill rate test. No modern games, even DX7 games, are completely dominated by this kind of simple rendering technique."

The first question that springs to mind is, what is a DX7 test doing in a DX9 benchmark? The second question is why take the step backwards to single-textured polygons when seasoned games such as Unreal Tournament and even Quake 2 make heavy use of multitexturing in their scenes? nVidia is correct in asserting that this test is certainly not representative of current, let alone future, games.

Game tests 2 (Battle of Proxycon) and 3 (Trolls' Lair) are both DX8 based, using Vertex Shader 1.1 and Pixel Shader 1.4. In fact, as nVidia states below, both of these tests are virtually identical, with the exception of the artwork itself.

"For all intents and purposes game tests 2 and 3 are the same test. They use the same rendering paths and the same feature set. The sole difference in these tests appears to be the artwork. This fact alone raises some questions about breadth of game genres addressed by 3DMark03."

However, the similar nature of these tests isn't nVidia's primary concern with game tests 2 and 3, but rather the rendering method adopted by FutureMark.

"In a scene with five lights, for example, each object gets re-skinned 11 times. This inefficiency is further amplified by the bloated algorithm that is used for stencil extrusion calculation. Rather than using the Doom method, 3DMark03 uses an approach that adds six times the number of vertices required for the extrusion. In our five light example, this is the equivalent of skinning each object 36 times!

Unreal world

"No game would ever do this. This approach creates such a serious bottleneck in the vertex portion of the graphics pipeline that the remainder of the graphics engine (texturing, pixel programs, raster operations, etc.) never gets an opportunity to stretch its legs."

What nVidia means is that because the geometry for objects is stored locally in video memory and skinning is done by the Vertex Shader, the skinning process now has to occur on each pass, which causes a serious bottleneck. They

ATi adds their 2.2 cents

It is well known that nVidia and ATi battle each other in the high-end graphics card arena, so it's unsurprising to see ATi siding with FutureMark over the 3DMark03 controversy.

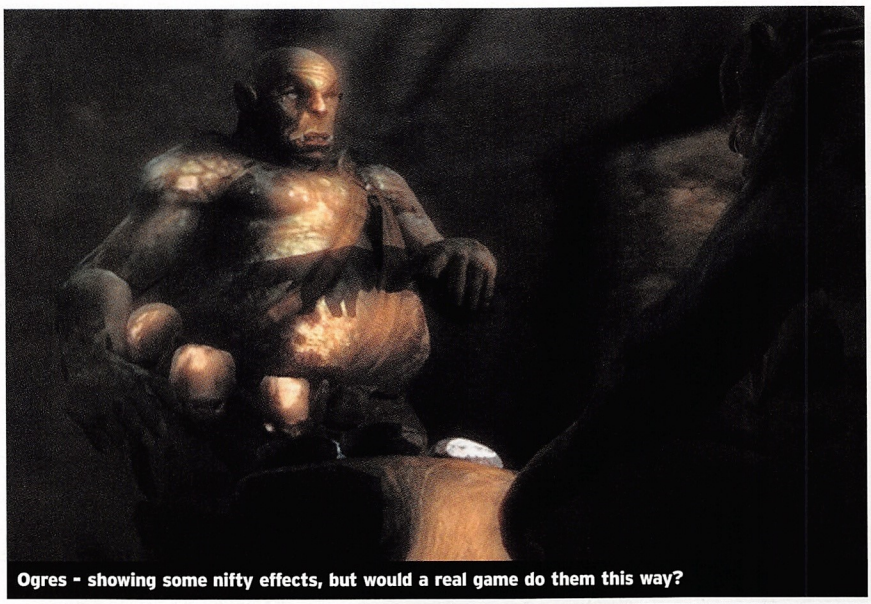
ATi has given full support to 3DMark03 and states that 3DMark03's main advantage(and most synthetic benchmark utilities) is that it is not subject to the long wait for developers to incorporate new DX features into their games and engines, which allows us to test hardware with the latest technology almost as soon as it is released.

This is true, however, ATi fails to acknowledge that much of the benchmark uses current (DX8) and older (DX7) technology, and only a section of one test is based around the new DX9.

nVidia attacks this cautious design strategy and considers it wasteful by comparing it to "designing a six lane on ramp to a freeway in the freak case that someone might drive an earthmover on to it."

FutureMark, however, threw its hat in the ring by asserting that "3DMark03 is designed to measure DX9 compatible hardware. This level of hardware does skinning several times faster than the CPU. This can be confirmed using the Vertex Shader test of 3DMark03, which is designed to measure, above all, skinning speed."

This then begs the question: Will PCPP use 3DMark03 in our benchmark suite? The answer is yes. We believe that it's still an excellent DX8 benchmark and although it features a small section of DX9 tests, they are, nonetheless, the only tests we've been able to get our hands on so far.



Ogres - showing some nifty effects, but would a real game do them this way?

One of the scenes nVIDIA claims has no bearing on real-world performance

also suggest that a CPU skinning method would be a much more logical choice, which only requires one pass. nVidia likened the inefficient rendering method to highway construction in the amusing analogy below.

"Designing hardware around the approach used in 3DMark03 would be like designing a six lane on-ramp to a freeway in the freak case that someone might drive an earthmover on to it. Wasteful, inefficient benchmark code like 3DMark03 force these kinds of designs that do nothing to benefit actual games."

It gets worse

As we saw with Game Test 1, nVidia believes that FutureMark uses a rendering method that is both inefficient and rarely used in the real-world. Furthermore, the use of Pixel Shader 1.4 in both of these tests is odd, considering that virtually no current DX8 games fully utilize Pixel Shader 1.4. What's even stranger is that if Pixel Shader 1.4 isn't available, the benchmark will automatically revert to Pixel Shader 1.1, rather than Pixel Shader 1.3. This can be a significant disadvantage to those with older graphics cards, as rendering an object in Pixel Shader 1.1 can take up to three times as long as it would in Pixel Shader 1.4. nVidia states:

"Current DX8 games, such as Tiger Woods and Unreal Tournament 2003, all use Pixel Shader 1.1 and Pixel Shader 1.3. Few, if any, are using Pixel Shader 1.4. It makes it difficult to conclude that these tests actually represent any of today's DX8 games."

The final test, a revamp of the highly regarded Nature demo in 3DMark2001 SE, is the only DX9 test featured in 3DMark03, and features Pixel and Vertex Shader 2.0, as well as a mixture of Vertex Shader 1.1 and Pixel Shader 1.4. From the outside, this looks to be a bona fide DX9 benchmark, however, according to nVidia there is much more to the application than meets the eye.

"This year's 3DMark has a new nature scene. It is intended to represent the new DX9 applications targeted for release this year. The key issue with this game scene is that it is barely DX9. Seven of the nine Pixel Shaders in this test are still Pixel Shader 1.4 from DX8. The same issues about Pixel Shader 1.4 described previously also apply here. Only two of the Pixel Shaders are the new Pixel Shader 2.0. Consumers, believing that this test gives a strong look at the future of games, will find it merely provides a brief glimpse, if at all."

nVIDIA's bottom line

So far, nVidia has presented convincing points about the various downfalls of 3DMark03. The following paragraph from their performance lab report summarizes nVidia's argument.

"3DMark03 has combined some pretty artwork into a set of four nice demo scenes. But, these scenes are so distant from real game applications that 3DMark03 just doesn't make it as a benchmark. Lacking any similarity to actual games, it misrepresents the gaming experience, and doesn't arm the consumer with the right information to make a purchase decision. It also forces hardware vendors to waste valuable engineering resources focusing on artificially fabricated cases that will never benefit real games. In the end, the consumer loses."

FutureMark's Response

Now that we've heard nVidia's side of the story, let's look at FutureMark's response. In regards to nVidia's Game Test 1 claims, FutureMark had the following to say:

"Just like game developers, FutureMark develops its game test content so that the end result looks good and works optimally. Most games use single texturing for a skybox because more texturing does not necessarily make the end result look better. Examples of popular games that use single-textured skybox include Crimson Skies, IL-2 Sturmovik, and Star Trek: Bridge Commander.

"As this issue was brought up during 3DMark03 development, we did a test by adding a second texture layer to the skybox. The performance difference stayed within the error margin (3%), and in our opinion the additional layer did not significantly add to the visual quality of the test. Thus, there were no game development or technical justifications for implementing a multitextured skybox."

Although FutureMark does make a valid point, this does not alter that the Game Test takes a technological step back, and is not representative of current and future games.

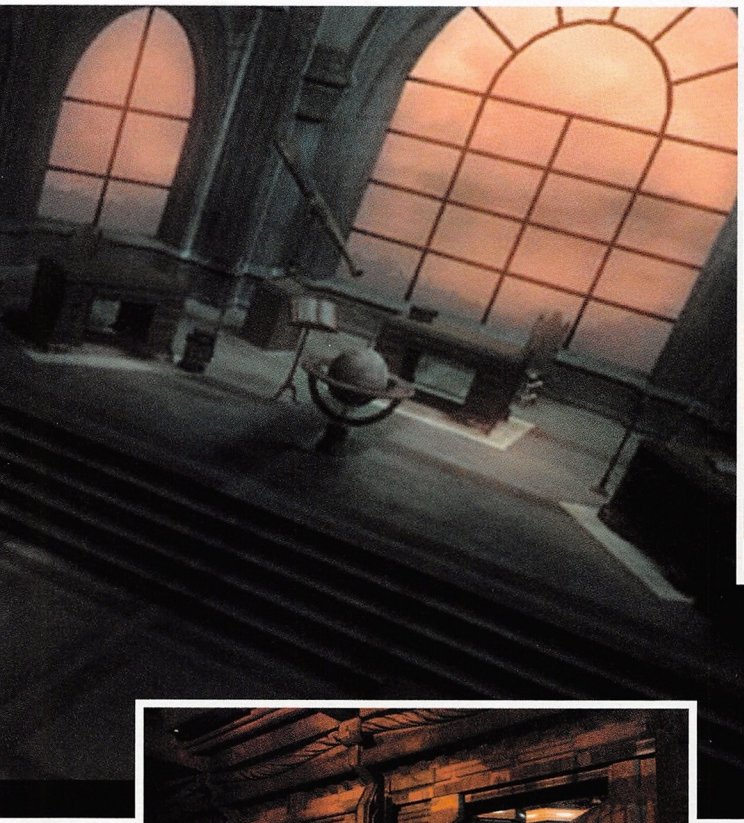
FutureMark also responded to nVidia's comments on tests 2 & 3, which we have split into categories accordingly.

Pixel Shader Use - "According to the DX8 specification, there are four different Pixel Shader models. In order to do a fair benchmark, you want any hardware to do the minimum number of shader passes necessary to render the desired scene. We analyzed all four shader models and found that for our tests Pixel Shader 1.2 and Pixel Shader 1.3 did not provide any additional capabilities or performance over Pixel Shader 1.1. We therefore provided two code paths in order to allow for the broadest compatibility"

Game Tests 2 and 3 using same rendering technique - "3DMark03 incorporates as many as three rendering techniques, whereas games use only one rendering technique. Our studies show that using three rendering techniques is more than adequate for producing valid results."

Vertex Shader Skinning - "3DMark03 is designed to measure DX9 compatible hardware. This level of hardware does skinning several times faster than the CPU. This can be confirmed using the Vertex Shader test of 3DMark03, which is designed to measure, above all, skinning speed."

"In order to do a fair benchmark, you want any hardware to do the minimum number of shader passes." *FutureMark*





Nature 2 - spectacular, but you may never see a game look like this



More Proxycon, more useless benching?

Finally, FutureMark answered to claims that 3DMark03 is "not DX9 enough".

"Once again, a good application should draw a scene as efficiently as possible. In the case of Game Test 4 this means that some objects use Pixel Shader 2.0 and some use 1.4 or 1.1 if a more complex shader is not required."

Testing the theory

Although it's quite difficult to test much of what has been said above, we can easily determine whether or not the Vertex Shader skinning method adopted in Game Tests 2 and 3 creates a bottleneck. This is achieved by running the benchmark in a variety of resolutions, and if the Vertex Shader is limited, as nVidia claims, then the result would be the same score across different resolutions.

For your reference, the PC used in testing was a Pentium 4, 2.53GHz with an Abit Ti4200 OTES graphics card, and 256MB of Corsair XMS3200 memory.

RESULTS

3DMark03 - Battle of Proxycon
640x480: 14.2 FPS
800x600: 12 FPS
1024x768: 8.7 FPS

3DMark03 - Trolls' Lair
640x480: 13 FPS
800x600: 11.3 FPS
1024x768: 9 FPS

As you can see, unlike nVidia's claim, the use of a Vertex Shader skinning method does not seem to be causing any bottlenecks at all.

However, when comparing the benchmark results of the two individual Game Tests, we note that the scoring is almost identical in all three tested resolutions. Although we can not test nVidia's other allegations with raw benchmark numbers, we've summarised the main points and our final view below.

Our Verdict

After hearing both nVidia and FutureMark's stance on the matter, it's time to draw some of our own conclusions regarding the overall usefulness of 3DMark03 as an indicator of current and future game performance. As far as Game Test 1 is concerned, being single-textured and based around DX7, it's clear that nVidia is correct in saying this test is definitely not an indication of current or future game performance, and really shouldn't have been included in the first place.

However, we can't agree with

Unlike nVidia's claim, the Vertex Shader skinning method does not seem to cause any bottlenecks.

nVidia's claims regarding FutureMark's Vertex Skinning method in Game Tests 2 and 3. Although we can't directly compare it with the CPU skinning method, we can clearly see from our tests that Vertex Skinning in these particular scenes do not create a bottleneck in the Vertex Shader. That said, we can't disregard the fact that the results for both tests are almost identical and therefore question their individual usefulness.

Finally, although Game Test 4 is one of the most beautifully rendered scenes we've seen to date, as well as a good first attempt at a DX9 benchmark, we can't help but be disappointed that it is only partially DX9 based. This certainly doesn't warrant the label as a "DX9 Benchmark".

So after breaking down the pros and cons of the latest 3DMark incarnation as well as hearing both sides of the argument, we have to decide whether we will add 3DMark03 to our benchmarking suite. Well, the answer is yes. We believe that it's still an excellent DX8 benchmark and features, albeit only partially, the only DX9 tests we've been able to get our hands on so far.

However, will we judge a piece of hardware solely on the scores from 3DMark03? Most definitely not. The bottom line is, although 3DMark03 is certainly not the biggest leap forward in graphics technology and definitely not a true DX9 benchmark, it's still reliable enough to secure a place in the PCPowerPlay testing suite - it just won't be as influential in our scoring methods.



Lighting effects will stress your card, but in a meaningful way?

2003

Is getting hotter!!

2003 has already seen some amazing releases from QV Software....
and the year has really only just started!
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www.qvsoftware.com.au

Virtual Skipper 2

Virtual Skipper 2 is the ultimate 3D regatta simulation. You'll take the helm of some of the sport's most famous boats, such as the DEFI AREVA, which is representing France in the America's CupTM; the Open 60, the "Formula 1" racer of the seas; the Offshore Racer; and the Melges 24TM. With Virtual Skipper 2 you'll race on best courses in the world under current international racing rules.



micro COMMANDOS

STRATEGY • ACTION • INFILTRATION



Stuck in the basement of a house, your micro commandos are setting off on a quest to find the ultimate weapon and take over the planet Earth. This must be achieved despite being barely the size of a pencil!! It's up to you to help them build their village and to explore the world of the big in search of resources located in the 4 corners of the house...



The partners

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And the latest and greatest does not end with just the 4 new titles above, we have many more new and exciting titles including.... *DINO ISLAND, AGASSI TENNIS GERNERATION 2002, DIVINE DIVINITY, JERUSALEM, MONSTERVILLE, THE SECRET OF THE NAUTILUS, BIG SCALE RACING, AMERICAN CONQUEST, COSSACKS - BACK TO WAR, BALLERBURG.*

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IN REVIEW GAMES

THE MOST AUTHORATIVE REVIEWS AROUND



Eminem and JC Denton. Meant to be or meant to split like a bag full of crap left out on the porch on a hot and humid day? Some PCPP forum members are upset by the prospect that rapper, turned thespian, Eminem is touted to play JC Denton in the film adaptation of Deus Ex. Others, like my mum, couldn't care less.

Amidst the froth and fury, I pondered about the passion gamers have for their characters, UNATCO secret agent Denton, that talented potty-mouthed stage performer and why I would have a bag of manure on my porch, anyway?

I scrounged about for some facts and figures on Deus Ex and Eminem and then analysed the data with my well-learned colleagues. The results were astounding. Both Deus Ex and Eminem's debut film, 8 Mile, spent some time in the Top Ten charts of their respective arts, but that aside there is nothing, I repeat nothing, that links either Eminem or JC Denton together for a marriage based on common interest and love.

The issue isn't about barring Eminem from playing Denton because he has nothing in common with a nano-technology enhanced counter-terrorist, it's about why some of us gamers have reacted angrily to it.

As this hairy question broaches the psychology of role playing, let me tell you about a friend of mine and his little brother.

Melbourne. 1988. As a kid, this friend of mine and his brother used to play Defender of the Crown on a Commodore 64 which ran on the smell of an oily rag and without a pause control. So, in the name of continuous play, he and his younger brother used to take turns feeding each other their meals, rostering toilet breaks and making excuses to their mum about the conspicuous absence of their sibling from the dinner table.

After many weeks of this behaviour, it came as no surprise when my friend and his brother grew to know and love their characters so much they would punch their little sister on the arm for even daring to say unsavoury things about Edward the Grim or Reginald Front DeBoeuf. They assumed the roles and owned the identities of these 32 colour-bit characters.

Gaming art imitating life? Perhaps, but that's what happens in acting too. Just as we assume the role of JC Denton, so will Eminem. We give little thought to whether the personalities of our mates will suit Denton's character, but some of us worry whether an actor's persona will appease our 'ownership' of Denton. But, just as one film character can have different actors putting their spin on its mannerisms and motivation, the same can be said of the millions of JC Dentons the world-over who play with their own quirks and flair.

Dina Oh
Deputy Editor
dinao@next.com.au









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GOLD AWARD	HIGH DISTINCTION	DISTINCTION	CREDIT	PASS	FAIL
The ultimate accolade. A game that receives a Gold Award is an essential purchase, and the only excuse for not owning it is either not having a powerful enough PC, or not having a PC at all. Or arms. It represents a new direction in gaming, a new benchmark against which all others will be measured. It defines its genre, or creates a new one. It is gaming. You must own it.	This is the finest in gaming. A fresh concept, a perfect execution, a meaningful extension to a tried and tested format, one or all of these are required for this score. We strongly recommend the purchase of each High Distinction game, but extremely fussy gamers may want to skip those HD games that don't also receive Gold Awards.	An intriguing new concept or a bold new direction that manages to pull its new trick off with a reasonable degree of flair. You will be impressed, at either the graphics, the gameplay or some other new element that you may not have encountered before. Or perhaps this is a familiar gaming concept, but one executed so well it's almost - but not quite - an essential purchase.	Solid, playable, largely bug-free, entertaining and maybe even a bit unexpected, these are the hallmarks of a game of Credit. You may have seen it all before, but you won't mind, because a Credit game does what it says on the box - it plays well and it keeps you hooked. An essential purchase? Not necessarily, but worth consideration.	A game that receives a pass is playable, but its concept may be flawed, its extras may be lacking or its graphical enhancements may have fallen off somewhere in a lengthy bug-fixing process. And bugs there may be, although in the end the game will, as we say, work. Purchase if you're curious, but discerning gamers will probably look for something more substantial.	There are more than 5000 games released each year. Some are gems. Some are merely unremarkable. Others are nothing more than a shameless grab for cash. Graphics will be rudimentary and gameplay will be worse. If you see someone considering a game that has failed, gently take them by the elbow and hurl them out of the shop. It's your duty as a good citizen.
90+	85-100	75-84	65-74	50-64	0-49

Command and Conquer: Generals

Developer: EA Pacific ■ **Publisher:** EA ■ **Distributor:** EA ■ **Price:** $89.95 ■ **Rating:** MA15+ ■ **Available:** Now

Another American Dream presses the buttons against change

SYSTEM

NEED
P3-800
128 MB RAM
32 MB Videocard
1.8 GB HDD

WANT
1.8 GB CPU
256 MB RAM
GeForce 3
or greater

MULTIPLAYER
Yessiree!

ONLINE
www.generals.org
Hardcore militant missionaries. A site where you can meet Cindy and Mike Jacobs, their son, their daughter and their "son-in-love" who are all "blessed with giftings" which enable them to "empart all manner of visions to the Corporate body of Christ". They are affiliated with the "Dutch sheets ministries" (which sounds like something you do to your little brother). I kid you not, I couldn't make this kind of bizarre stuff up.

It seems like it is the game we have been playing for longer than most of us care to remember. Ever since the genre had Dune 2 crawl out of the primordial digital ooze and nestle itself on 486 people, it has been commanding and conquering with avid devotion. The latest iteration in the series, Generals, looks like this trend will continue.

This time around, the landscape is completely different, even if there is a lot about Generals that feels eerily familiar. There are three new combatants: the ever reliable and self-righteous USA, the inscrutable Chinese and the shadowy terrorist organization known as the GLA.

The basic gameplay blueprint, however, remains true to the C+C legacy. You must, more often than not, amass resources, build a huge base, climb the technology tree and send out your army to hit the enemy where it hurts.

In this regard, C+C has a lot in common with Red Alert and Tiberian Sun, but a lot has been done to address play balance issues while adding new features and delivering a visual spruce-up to the game as well.

Graphically this is the first Command and Conquer game to really deliver a combination of great visuals and efficient code that reasonably handles a decent numbers of units onscreen. However, the downside of this more powerful engine is that many of you will be forced to upgrade if you want to get the game working on your poor old PC.

The single player game delivers seven missions per fraction as well as endless fun sticking it to the computer-controlled armies in skirmish mode.

Game for drips?!

Each of the campaigns ease you into the action and drip-feed you the new features and units unique to each faction. Veterans will find they have finished each of the campaigns much faster than perhaps they would have preferred. The action is also not particularly challenging unless it is on the hardest setting, which perhaps indulges a need to make the game more accessible to inexperienced players.

The most obvious change to the business of getting your war machine up and running revolves around EA Pacific's totally new economic model. So, instead of messing with the protracted process of harvesting, you can collect supplies from a limited number of supply dumps scattered around the map.

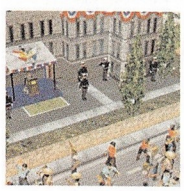
You can also generate cash using your own resources as each faction has an independent means of funding their war effort.The GLA can build black markets which generate income, the Chinese can employ hackers to suck the internet dry and the US can build supply drop-pads for helicopters which deliver extra resources.

Another significant step forward for the series is the promotions system. At the start of any mission you are a single star general, but as you belt your enemies you accumulate experience points, and once these reach a certain level, you can spend them on a raft of improvements. There are options to generate more experienced units, call in off-board artillery and air-strikes, as well as improvements which see you summoning scout drones, training

AI STANDS FOR?

Always Idiots? Surely, we'd hope not, but in true to form C+C style, Generals features enemies who don't always adopt tactics most likely to impress. Troops being sent your way in piecemeal groups is something you will still find disappointing. Also, it is sometimes possible to take enemy troops on without them returning fire as they seem to be in a 'move to waypoint' mode.

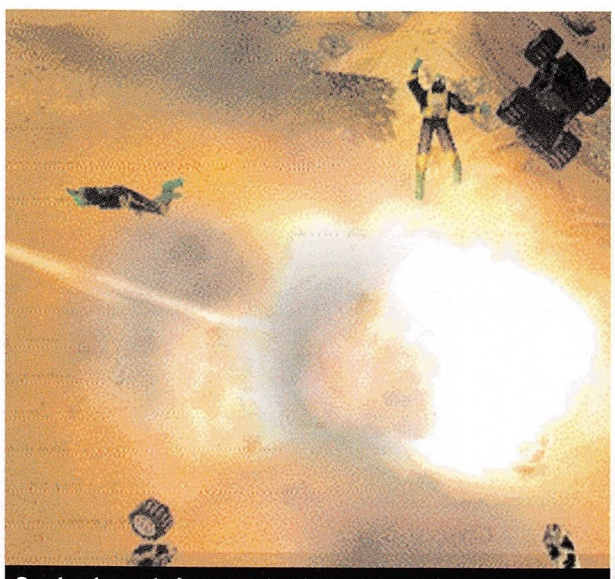
So, you will find the game isn't the most intellectually adept opponent, even in brutal mode: it is possible to beat three opponents if you play in a cagey fashion and exploit the computer's weaknesses. Sound defensive positions are the order of the day. If you want challenging opposition, online is the only place to play.



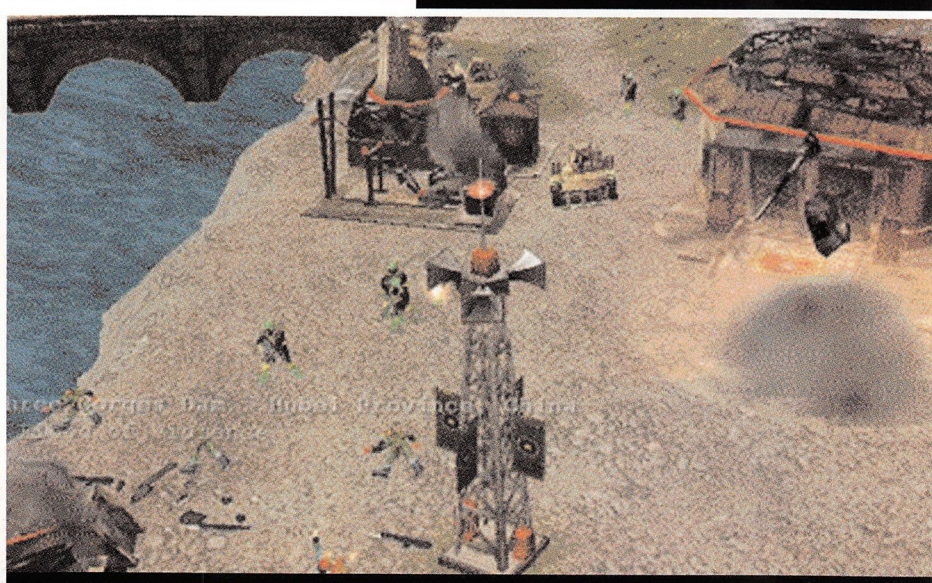
You start as a single star general, but as you belt your enemies you accumulate points that you can spend on a raft of improvements



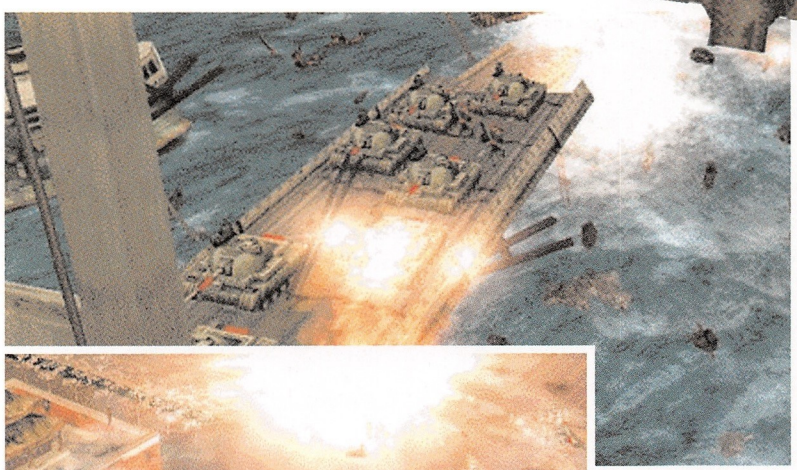
America good, GLA bad and China... weird?



Spectacular explosion = spectacular system requirements



All hear this! There are no quirky mind-control robots in this game!





As usual, nukes don't actually do that much damage

elite snipers, building scud launchers, stealth fighters and a nuclear cannon.

Each faction has a varied army at its disposal, and there is a sense of 'paper, rock, scissors' symmetry about Generals as each unit type has a natural foil as well as a number of enemy units it is particularly adept at obliterating.

Mob rule

There are obvious inclusions like tanks, artillery and ground troops, but there are some very cleverly designed units with more distinctive abilities. One of the most amusing is the GLA's angry mob. Mobs can be devastating in the right circumstances and can also sound bloody funny as they rave on and get out of hand. Keep an ear out for the hilarious moment when you upgrade and the mob cries, "AK-47s for everyone!". Funnies aside, The mob is also dangerous and can mince armour, destroy buildings and blitz most types of ground troops. However, send a sniper or a soldier armed with a Flash Bang Grenade after the mob and they'll quickly fall.

The GLA can scavenge the battlefield for cash and parts too, scoring some pretty hefty upgrades to their tanks and other units if they pick over the remains of destroyed enemy vehicles. The heavy hitting marauder tank is particularly good at doing this if you send them trundling over the scrap of enemy units where they pick up twin guns higher in calibre than the original. The GLA have hijackers which is just the ticket when you are being rushed by hi-tech American tanks or the rolling fortresses that fight for China. Your hijacker can grab these units for your own with which punish your enemy with their own destructive toys - it's so much sweeter this way! Another GLA unit worth mentioning is their camouflaged bomb truck. Hide this lethal lorry amongst some of your regular units and send it rushing into enemy lines where it can destroy many tanks at once. The bomb truck can be made to look exactly like any other vehicle and is such an insidious weapon that'll you'll get quite a kick out of it.

The GLA are also the only force that doesn't have to power their base, a fact that does make them easier to keep going, even in the face of stiff enemy opposition.

However, the GLA are found lacking in airborne qualities as they can't even get a pissy wooden glider up into the stratosphere. Yet they don't need mastery of the air when they can move huge number of troops and units underground with their tunnel networks. This works very simply. Build two tunnel entrances and troops who enter at one location can instantly exit at any of the other tunnels, which also expands no matter how many tunnels you build. This makes the GLA extremely good at moving huge forces anywhere on the map and then melting away or counterattacking elsewhere where necessary. GLA units also have solid anti-air capabilities. Their AA half-track will pepper anything skyward with a vicious barrage of lead, sending the crafts earthward in a matter of seconds.

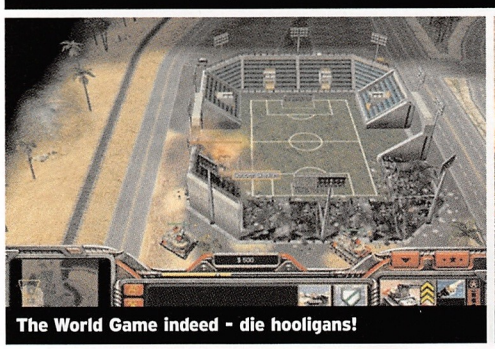
There are also some superbly



A familiar interface gets you up and playing in seconds



Night time bombing runs - deadly



The World Game indeed - die hooligans!



Parking in Redfern is always like this

MATRIX MOVES

The proliferation of slow motion 360-degree pans in the pre-mission segues shows that the guys at EAP are obviously big fans of Max Payne and The Matrix. You will find the first time you see the camera panning around to better view the explosion with units and bodies flying all over the place in slow motion, is pretty cool. However, the use of this in (too) many of the segues proves the old adage, 'you can get too much of a good thing'. The over-used panning becomes pretty ho hum after a while.

THE OBLIGATORY POLITICAL BIT

At the time of this review, multiplayer servers were not available for testing. We have high hopes for this aspect of Generals, which promises a mix of a large-scale persistent-state world and more intimate team-based gaming associated with the likes of Counter-Strike. However, as Freelancer's main focus is on singleplayer, we believe the above score will not be significantly affected by multiplayer performance. Expect a multiplayer report as soon as servers become available.

Her voice sounds like she's taken time out of her weekly phone sex gig to breathe out your orders as you command China





Some of the mission objectives read like US propaganda



GLA units are rusty, but feisty

conceived American tanks and vehicles. The US can deploy scout or repair drones to support their armour. Yank tanks are also very hi-tech with Paladin units even having their own laser guns which shoot down incoming missiles, but as it has a slow rate of fire, it is necessary to quickly destroy the source of the incoming rockets.

Watch my Tomahawk talk

The American Tomahawk missile launcher is also one of the greatest artillery units we have ever seen because it simultaneously deploys a drone to repair damage to the tank whilst hitting enemy targets at extreme ranges. A bunch of these will quickly wreak havoc amongst an enemy armoured formation or, better still, an enemy base. That said, the Tomahawk is pretty fragile against close range attacks or air strikes, making it, yet again, important that you master combined arms assaults.

If you like the idea of allying with the Chinese, then behold the awesome Overlord tank, a massive twin-gunned behemoth which can even be upgraded with a Gattling gun, Propaganda Tower, or Bunker sitting on the top of the turret. When equipped with the Gattling gun, Overlords have the power to take down aircraft and land troops and, as a result, can totally dominate the battlefield.

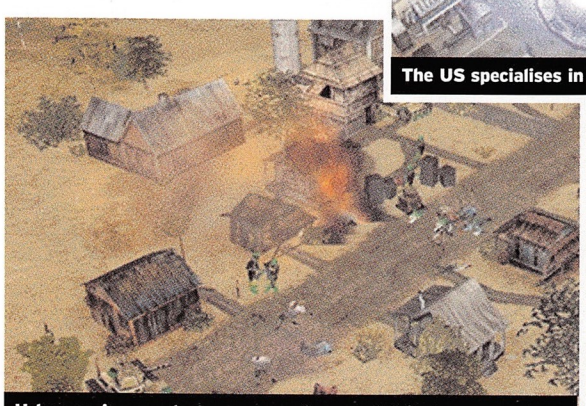
But the Overlord is a slow beast which can be taken apart with good hit and run tactics if you can make it past the massive numbers and firepower of great Gattling gun tanks and flamethrowers. The Chinese can also gain a decent attack bonus when they gather in significant numbers, and you'll know the horde is on the prowl because Chinese units fighting with this advantage are highlighted by a Communist star.

The basic interface feels very similar to older C+C games, but there are some differences that will change the way you play. For example, the game adopts the Starcraft model when it comes to building units, which means that all of your queues can only be accessed by clicking on the


The US specialises in hi-tech special weapons



A GLA Angry Mob makes short work of enemies


Urban environments are now much more detailed


Sometimes the game does look like an episode of Doctor Who



Line 'em up and knock 'em down!



Yes, it's a SCUD. Politically sensitive, this game ain't



Be warned: an Ion Cannon alone won't win the day

building that cranks them out. There is no sidebar menu where you can pump out units, so instead you have to select the appropriate building and then select the unit you want to build. This also applies to super weapons, and having to open a building and then trigger a super weapon every time, becomes annoying.

This is an irritating demand when you are using your tactical verve to co-ordinate super weapon attacks with ground forces assaulting an enemy base as you will find yourself having to scroll back to your base, select your super weapon and then return to the attack you were focusing on with ground troops. However, there is a way around this problem. If you lock down a camera hot key to your super weapon site you can quickly call it up and then return to the assault, yet this not an effective remedy and remains a troublesome trait.

It is also particularly odd when you remember that the rest of the special attacks you can queue up (off-board artillery, etc.) are located as clickable buttons on the side of the screen. Surely a space for special weapons would have been a logical inclusion?

Eye candy for the apocalyptic

Despite lacking a sidebar menu, the super weapons are devastating and a delight for fans of eye-candy. The Chinese Nuclear Missile sends a massive mushroom skywards while the American Particle Cannon stabs buildings with a scintillating beam of light. Even the GLA Scud Storm delights as dozens of rockets laden with chemical weapon agents rain down on any target on the map.

True to its pedigree, the music and sound effects in Generals are excellent, although this appears to be one of the first C+C games to not feature the compositional skills of master game musician, Frank Klepacki.

The in-game speech is also very good, though some may find the sanctimonious Americans' enthusiasm a little hard to swallow.If you command China, the breathless female voice sounds almost like she's taken time out from her weekly phone sex gig for the Chinese cause.

If you are a singleplayer fan looking forward to a scripted campaign, you are in for disappointment. The missions are too short, the AI is at times pretty thick, and the interface is still not as good as many other RTS titles. However, the skirmish mode is something you can return to ad infinitum, and as long as you can get the network code working on your machine there is always online play, something which we cover on page 92.

Judging by the fact that the singleplayer game lacks long-term depth, it is clear that EA Pacific was given a mandate to focus on Generals' multiplayer aspects and this decision will please many, although there is bound to be fans of the single player C+C campaign who will feel short-changed.

So should you stump up your hard earned for the latest in this long running series? Well, the skirmish mode means you will have plenty of single player fun, even if much of it lacks the structure of a long and rewarding campaign mode. You will also be able indulge in multiplayer mayhem, which is worth the price of admission alone (again see our separate multiplayer review). That said, if you aren't playing online, this suffers from feeling a little like Generals 'lite'.

Steve Polak

HUNGRY BEAST

Generals is one of those games which you might love and loathe in equal measure because many will need to upgrade their systems to get the game running properly. The specs suggest the game will play well on an 800 mhz PC, but recommend a 1.8 Gb unit. EAP aren't joking either, as the great new 3D graphics suck up processor power faster than a turbocharged TV evangelist rakes in cash.



Veteran units gain special abilities



More GLA footsoldiers meet a grisly end



You don't actually get to control this boat :(



Sweet, jingoistic victory!

RATING

PC PowerPlay GAME OF HIGH DISTINCTION PC PowerPlay

FOR

- Great units
- Top 3D visuals
- Lots of character

AGAINST

- Short missions
- AI is still a tad thick
- Singleplayer flawed

OVERALL

Predictable results from the kings of RTS. Singleplayer issues outshone by multiplayer goodness

86

BF1942: Road to Rome

Developer: Dice ■ **Publisher:** EA ■ **Distributor:** EA ■ **Price:** $49.95 ■ **Rating:** M15+ ■ **Available:** Now

All roads may lead there, but it's still hard to find with fewer maps

SYSTEM

NEED
500MHz Processor
128MB RAM
32MB Videocard
1.2GB HDD Space

WANT
800MHz Processor
256MB RAM
64MB Videocard
Broadband

MULTIPLAYER
Oh yeah

ONLINE
www.polandsholocaust.org/italiiaa.html
Check out a Polish soldier's account of the battle at Monte Cassino.

The 3D action online game which redefined the genre is now offering up a little more of what you loved with the ever-predictable expansion pack.

As you'd expect, the focus in Road to Rome is World War 2 action amidst olive groves, steep mountains and the rest of the Italian countryside. This makes for some great subject matter and the terrain on offer really adds a lot to the gameplay, even though there could have been more maps.

The multiplayer possibilities with the new maps are quite significant and you will find that there are some great stalemate and rush opportunities with the new areas you get to fight in. However, even the single player code has been given a little bit of a tweaking, and this is great because this is perhaps where the game has been at its weakest.

The guys at Dice have done their best to exterminate some of the more serious bugs from the code and you will be delighted to now note that the bots don't have that magic ability to jump into tanks that are around fifty feet away.



New maps have vaguely Italian flavour



Ah! The sweeping hills of the Tuscan lowlands!

Flak em!

With EA in recent times getting flak for shifting some very lightweight expansion packs, such as (ahem) Sims and MOH, some would feel correct in accusing Road to Rome of fitting this despicable profile. Aside from a few minor tweaks here and there, EA has provided only six maps and very few new tanks and weapons. However, if you grab the latest 1.31 patch you will find a lot of the bugs which have plagued the game, especially the wall hack bug, have now been dispensed with.

Also, the available new maps add a lot to the experience as they are, for the most part, brilliant, and reason enough to get your hands on the pack.

The single player part of the package is fun, as you explore the lush Italian countryside, replete with villas, greenery and some huge mountains. However, 1942 was, and is principally, a multiplayer game, and this is where the pack delivers the most value.

The new maps really intensify the experience and have been cleverly designed. Only the beach assault map, Operation Husky, feels too similar to those in the original. The rest of the terrain on offer delivers interesting new gameplay possibilities and makes for exceptional team play.

Indeed, co-operative assaults are far more crucial to the strategy needed in this game because if you are to deal with the terrain and numerous choke points, you will need to pursue a combined arms approach, which makes taking ground in this pack a much more challenging task.

Gamble at Cassino (duh!)

If you are in the Allied camp and have to slog uphill fighting the terrain and the enemy at the same time, maps, such as the daunting Monte Cassino, look almost too hard to take on. Indeed, the map was based on the historical battle that saw the Axis, including some crack German Paratroops hold up a huge Allied force for a long time, resulting in massive Allied casualties.

Monte Cassino is probably our favourite map as the skill required to do

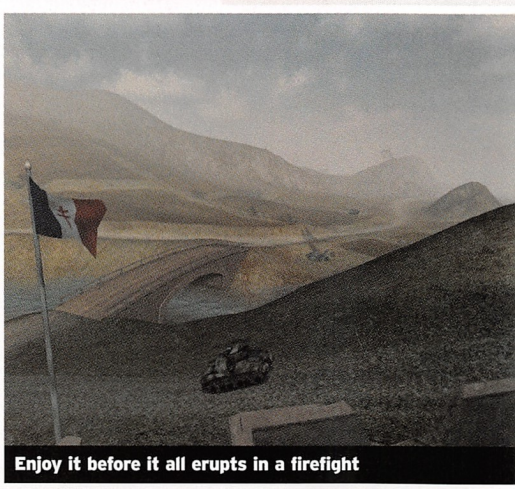
HISTORY NEVER REPEATS...

...unless you are playing a hapless Italian soldier in the game. Mussolini's military were so badly led, equipped and trained that they really were more of a handicap then a help for the Axis powers, and the game reflects this to some extent by featuringsome of the poor quality Italian equipment.

The Italian navy and air force were even less impressive than their army counterparts, so it comes as no surprise that they had a very small role in the defence of their homeland when US allies invaded Italy in 1943. Indeed, most of the Italian navy had been torn apart by aircraft during a number of stunningly unsuccessful actions leading up to the invasion.

Italian planes were real dogs with slow and underarmed open cockpit fighters. Their bombers were even worse as they suffered from pitifully small bomb loads and could never operate in safety as their fighters, which were supposed to provide air cover, had incredibly poor range.

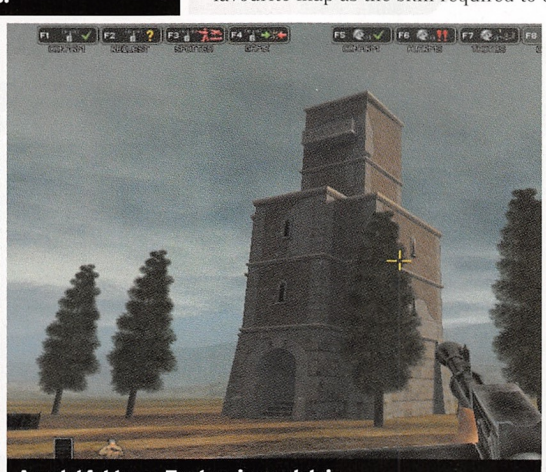
If anything, the Italian forces in the game are measurably better in strategy and arms than history suggests they were.



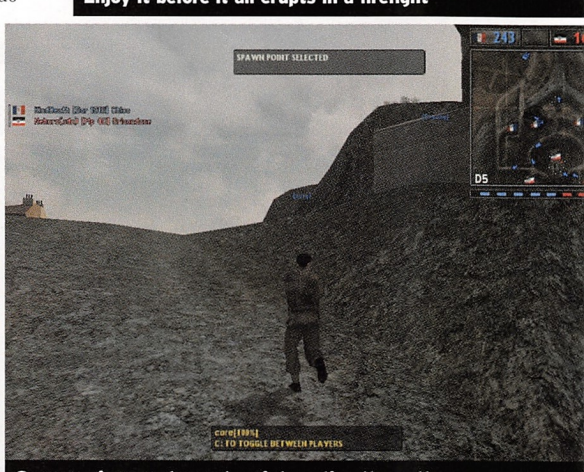
Enjoy it before it all erupts in a firefight



Is that a tank in Granny's back yard?



A watchful keep. For keeping watch in



Some environments are less interesting than others

Bridges and narrow pathways are frequent and test your mettle as getting past them is one of the biggest challenges in the game



Novelty sized tanks? Or soldiers?



Defending a choke point - grisly



Can you hear something?



Oh yeah, that was it



Why am I the only one shooting?



Sunny out here, isn't it?

well there is significant, and it is also great fun either hunting down the snipers and enemy artillery units hiding in the hills or using those same hillside positions to wreak havoc on the Allied invaders (or should that be liberators?).

Other maps are almost as good, too, especially if it means touring the fecund and beautiful Italian countryside trying to dislodge the enemy. Choke points are obviously something that Dice have thought a great deal about in this game, as most maps have areas which you must pass through in order to advance, and these areas are usually great places for the enemy and your supporting forces to concentrate their fire.

Bridges and narrow pathways are common in the game and they really test your mettle as you find getting past them is one of the biggest challenges in the game. It is also interesting to note that most of the maps eschew large-scale airborne action, so you can't easily overcome the gridlock by taking to the heavens. This is perhaps one of the small criticisms of the expansion pack because you will find that apart from the Anzio scenario, most of the maps you will explore seem designed to minimise air combat. So fliers, you have been warned there is less here for you.

Tank tweaks

However, on the ground some great tweaks have been made to the available land units. Tanks now have more realistically limited firing arcs and, better still, the ancillary gunners positions are now protected so you don't get shot to the sheisenhaus all too quickly. The tanks have also been given a more serious competition in the form of better dedicated anti tank guns, which can be lethal and make it more important than ever to have at least one member of your team hanging back away from the font line and specialising in artillery bombardment.

There are also new infantry weapons, too. Engineers get to use a bayonet for some close quarters slice and stab work and, while this sounds good, you will find the opportunities to use this most primitive of weapons generally few and far between. Worse still, if you have the weapon readied, you can't zoom in so it presents a real handicap - not that a telescopic bayonet would have made sense in the real-world anyway. There are also new small arms like the Sten gun which is great for the Allied troops.

The Free French forces and the Italians help add more personality to the action, even if some of the Italian weaponary seem to be a little too closely based on their historical record - in other words they are crap. This is especially true of the Breda Model 30 machine gun which is not very much fun to use as it seems to suffer from a serious problem in the accuracy or damage stakes. The Italian tanks also leave much to be desired espescially when compared to the excellent Allied M3 Lee/Grant tank or the M3 halftrack which carried a 75mm howitzer. The Axis do get some compensation with a very powerful Sturmgeschutz assault gun. Also, the new aircraft, Me 110, which was actually a pig of a plane in reality, is probably the heavier hitter when compared to the English Mosquito.

So as long as you aren't a fanatic flier, this an expansion pack to suit all tastes and well worth a look, particularly if you enjoyed the original game.

Steve Polak

CHOKE EM!

The basics for success in Road to Rome revolve around letting the, at times, imposing terrain work for you as much as possible. Use the terrain for cover as you advance and don't simply rush for an obvious potential choke point, such as a pass or a bridge. Instead, call for support and gently feel out the area, teasing enemy units until they open fire so then you can nail down their whereabouts.

Artillery support is essential in this expansion pack, as are excellent sniping and scouting skills. Dumb tank rushers will quickly find they will always get toasted. The maps really intensify the play and make 1942 a tactical and skills based game with recompensing results that we can all appreciate.

RATING

PC PowerPlay GAME OF DISTINCTION PC PowerPlay

FOR

- Great maps
- Good unit tweaks
- French and Italians!

AGAINST

- Few new weapons
- Needs the 1.31 patch
- Limited air combat

OVERALL

Well worth it for the value it adds to the Battlefield: 1942 experience

77

Haegemonia: Legions of Iron

Developer: Digital Reality ■ **Publisher:** Wanadoo ■ **Distributor:** TBA ■ **Price:** $89.95 ■ **Rating:** TBA ■ **Available:** Now

Best explosions in a game, ever!



When I grow up, I want a car like THIS!

SYSTEM

NEED
P3-500
128MB RAM
32MB Videocard
550MB HDD

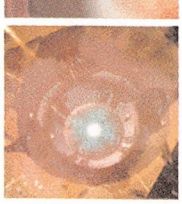
WANT
P3 1Ghz+
512MB RAM
64MB Videocard
550MB HDD

MULTIPLAYER
Yes

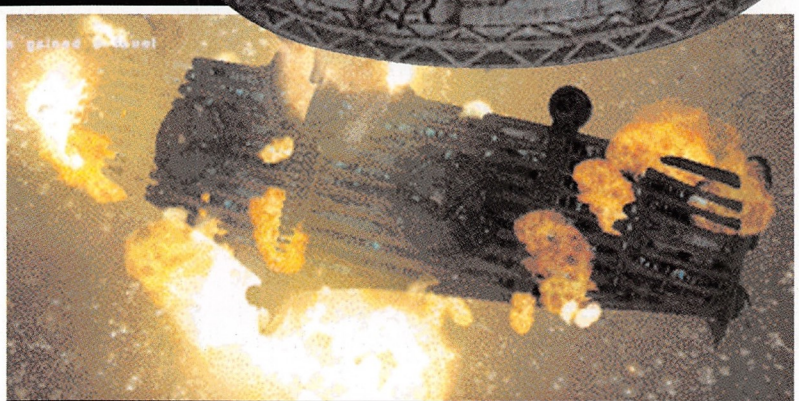
ONLINE
www.digitalreality.hu
To see what the Hungarian developers are getting up to.
www.haegemonia.com
The official site with all the news and a playable demo.







Digital Reality, the Hungarian company that has achieved much fame and success with the Imperium Galactica (IG) titles is now attempting to wow the audience with a completely different game. This is an important point as fans of the IG series need to understand that Haegemonia isn't Imperium Galactica 3. Designed to be unique, Haegemonia's difference lies in a heavier focus on multiplay and a very strong singleplayer story line. This and also the fact that Infogrames has sold the sequel rights for IG3 to Philos Laboratories. In a nutshell, the best way that Haegemonia could be described is as a real time version of Masters of Orion 2. Yes, it actually can get that good.



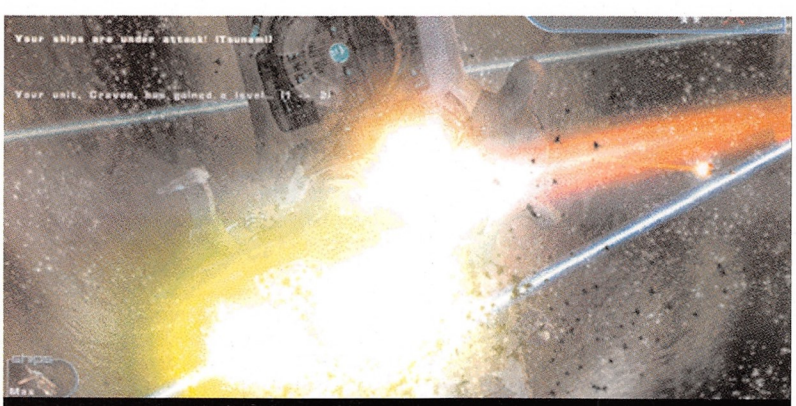
Oh, so that's why I shouldn't have pressed that button

Realtime MOOing

There is so much to do in Haegemonia that at first it can be a little overwhelming, but it's worth being patient and getting past the moderately steep learning curve. As a type of futuristic admiral, your role is to co-ordinate ships, planets, research, heroes, meet objectives and sometimes do it all in a restrictive time limit.

The game starts easily enough but due to its complex nature is worth a little criticism for not shipping with a tutorial - an omission that is bound to frustrate a number of users. This problem is alleviated somewhat by the use of missions which, although unusual for a 3E (explore, expand, exploit) game, Haegemonia shows that this genre can handle it successfully.

Depending on the scenario, you're thrust into different solar systems with objectives to complete. Sometimes it's a simple matter of destroying the enemy's asteroid miners, at other times you're called to take over an entire solar system.



My ships are under attack? What makes you say that?

INCOME

Making money is an important part of Haegemonia and it offers numerous ways to do so. First up are good old taxes which can be set individually for each planet or globally. Unsurprisingly, if you set a low tax, your population will be happy; the higher the tax the unhappier they will be. Other means of income generation include miners who suck the rich resources out of asteroids, interstellar/interplanetary merchants who make a living by trading with other planets and wreckage recyclers who extract money by disassembling the drifting remains of destroyed capital ships.

Sensitive types take note of the last statement, planetary populations are huge and if you're squeamish at the thought of being responsible for the deaths of billions of virtual aliens then you're better off sticking with The Sims.

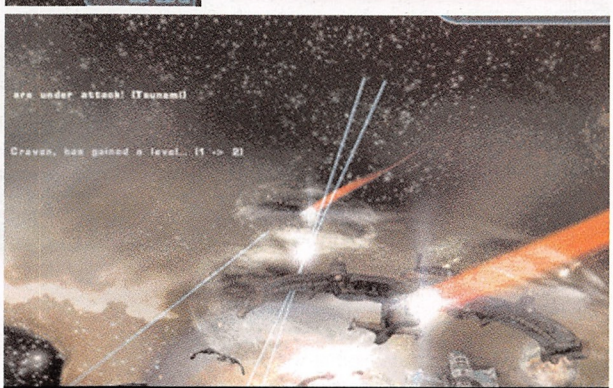
Persistence with the game, though, is extremely rewarding, if not a little busy. One of the advantages that missions give is the ability to restrict how much a





Planets are actually tactically useful - a welcome change!

"Our goal is that players should forget the time and place they are in when playing the game"



Always you tell me my ships are under attack!

CONTINUITY OF MISSIONS

Haegemonia can't really be placed into a specific genre, but it is essentially a composite of game types and has many surprises in store. Missions, for example, aren't always going to be a simple matter of progressing each time to a new and unique sector, but occasionally you're sent back to a sector you've already captured. This is interesting because the defences of that particular sector and its planets are activated when you return. If you left the sector strong and well defended then you can expect an easier time when you have to go back and defend it. Do a sloppy job, though, and you'll have a much tougher time in the mission.

RATING

PC PowerPlay GAME OF HIGH DISTINCTION PC PowerPlay

FOR

- Incredible graphics
- Absorbing gameplay
- Bombardment

AGAINST

- Terrible story
- Vague missions
- Difficult to move

OVERALL

Although not entirely perfect, a thoroughly absorbing game that provides a wealth of entertainment.

89



player can research at each stage of progression. This makes for a nice element of strategy where you have to carefully decide what new technological gadgets you wish to use in order for a mission to be successful. Amidst the very comprehensive research tree, three different weapon types create the classic dilemma; whether it's better to specialise on one weapon all the way to its particular super weapon, or alternatively, research all three equally in the hope that a balanced fleet will prevail. Either way will get you to the end game, but both would require different tactics.

Actually, it's the limitations the game places on you that help to make it so appealing. Planets, unless terraformed or upgraded with different technology, are limited in population and, therefore, production capacity. This restricts your ability to create a large fleet quickly and makes defending territory a highly tactical experience. However, ships do level up as battles of equal size are easily resolved. But back to the limitations, at the end of each mission you will be able to choose only a certain number of ships and heroes, who have skills that increase the abilities of the ships they're controlling, to take with you.

Unfortunately, Haegemonia is not without its flaws and the biggest problem would have to be the poorly translated story which has worse dialogue than a low budget morning cartoon. Movement along the Y-axis is also quite broken, and it can be an extremely frustrating affair when you're fumbling with the interface to position a military station so it can capably defend a planet. On top of that, some missions can be quite vague with one line objectives that end in trial and error to figure out what the game wants. Although these flaws do not lessen the game's finer points, it would have been nicer if they were addressed before release.

So pretty, so very pretty

Graphically, Haegemonia is amazing. The texture sets for ships are of a high quality and make for detailed models that are a treat to observe. Irrespective of their size, they feature impressive 3D effects such as spectacular highlights and shadowing across the hull that is correctly calculated based on the position of the sun.

Combat is a glorious sight to behold as fleets of ships engage in battle and fire off ion beams, missiles, quantum and proton weapons. Each weapon type has its own graphical effect and when space is filled with ion blasts and hundreds of missiles, the eye candy is exceptional.

But it's the explosions that are really impressive and Haegemonia, quite simply, has the best pyrotechnics of any PC game. The smaller ships explode in typical fashion, but as you progress and the ships get larger, the explosions get impressive. With secondary and tertiary explosions rocking capital ships, it can take a good deal of time for the heavier vessels to blow apart, but as each explosion can use different animations from the available large pool, the destruction is varied.

Planets are also given excellent attention to detail with an accurate vision of a dark and light side as they revolve around the sun. As the population grows, you will see the number of city lights on the dark side of the planet slowly increase.

However, in the later stages of the game, this is nowhere near as amazing as terraforming, which makes hostile environments suitable for human habitation. Chances are you will be terraforming to get another dose of the game's incredible graphics rather than achieving it to improve the living conditions of your people. Once the terraforming process is complete, the planet emits beams of light like the rays of the sun and eventually explodes in a sequence that bears more than a passing resemblance to the famed Star Trek 2 genesis device. Completely rendered in real time, it's a "blast" to be in the midst of battle only to have a terraforming shockwave pass you buy.

Swan song

Despite some annoying flaws initially in the game, two factors about Haegemonia make it completely worthy of PCPP's Game of High Distinction: The amazing graphics and completely absorbing gameplay. To quote the developers, "Our goal is that players should forget the time and place they are in when playing the game. We want them to be very much surprised when they look at their watches after wanting to sit down to play for only a few minutes."

Well done, Digital Reality, I found myself looking at my watch in surprise, and I suspect, many others will too.

John Thomas

Platoon

Developer: Digital Reality ■ **Publisher:** Wanadoo ■ **Distributor:** QV Software ■ **Price:** $89.95 ■ **Rating:** M15+ ■ **Available:** Now

War. What is it good for? Well, with this game, it's absolutely nothing

SYSTEM

NEED
P3-500
128MB RAM
32MB Videocard
500MB HDD

WANT
P4 1GHz+
256MB RAM

MULTIPLAYER
Yes

ONLINE
http://www.neravt.com/left/invade.htm
Why not prove that games are educational and learn about the Vietnamese conflict, and US imperialism in general? Here you can read all about the B52 carpetbombing in Vietnam and the My Lai massacre. Or you can just look up more porn.



Dodgem Tanks!

In Oliver Stone's Oscar winning Platoon, we got to see young men cut to pieces physically and emotionally. Just so the film had that rip-you-up-inside-something-special quality, Stone based it on his own experiences in the Vietnam War.

Digital Realities's game borrows the imagery of the movie, mainly for the cover art, and takes players into the jungle to wage a real-time strategy war against the Viet Cong.

The movie clearly states that war is hell, and Digital Reality's game also enforces that notion.

Close Encounters

Platoon has some great elements like the terrain modifiers where you are able to judge how the area across the clearing will affect your cover as well as visibility into and out of the foliage. This immediately conjures images of creeping forward and running from trees to drop in the grass and then crawling forward while the rest of your troops cover your advance.

It brings to mind decisive victories, luring enemies into ambush, daring recon missions, a story that takes you into the war, and linking one mission into another.

While that's the idea, Platoon never quite pulls it all together. Firstly, your line of sight is limited in range and that means if you were to creep someone forward and they see the enemy, the guys behind him providing cover probably won't and without being able to lay down blind suppression fire, which is the main combat strategy for the US, the characters can't do much at all.

Then you have the problem that as soon as you come into the line of sight of an enemy he automatically sees you, which makes sneaking up and recon really tricky unless you get lucky and the VC are facing the wrong way.

Luring enemies would be a good idea except you tend to get shredded before you make it back out of their line of sight.

Finally, the missions of Platoon may very well be based on real conflicts but witnessing the main character write letters home and providing a few paragraphs of text as the core element of the story doesn't provide a convincing link to each mission.

What you Get

A further woe is that Platoon seems to misjudge the balance between realism and fun whenever a conflict occurs.

Digital Reality boasts realistic soldier movement, weapon rates of fire and, most notably, fighting. Maybe fighting was this messy in Vietnam, on that I can't be sure, but what I'm confident about is that the VCs you knock off their feet shouldn't get back up after being hit by a grenade more than once. Needing your special Grenadier to use three of his ten shots on one clump of resistance is when the line between fantasy and reality blur.

On the other hand, if your unit of rifle men run into VC troops and then flee to cover, you almost always lose someone and often get your arse handed back to you in a

NOT AS GOOD AS THE FLICK

Oliver Stone's movie was about a volunteer recruit (Charlie Sheen) landing in a unit lead by two very different men. One, Elias (played by William Defoe) is a real stand-up guy and almost a saintly port in the madness, while the other, (played by Tom Berenger) is his dark reflection, corrupt and self serving.
The movie follows Stone's experiences through Sheen's character as he gets a taste of Nam and all the horrors of participating in a war first hand.
When it was released back in 1986, it won the Best Picture Academy Award as well as Oscars for Direction, Sound and Editing. The game failed to live up to the movie.







Last one to the mound is a yellow-bellied draft-dodger!

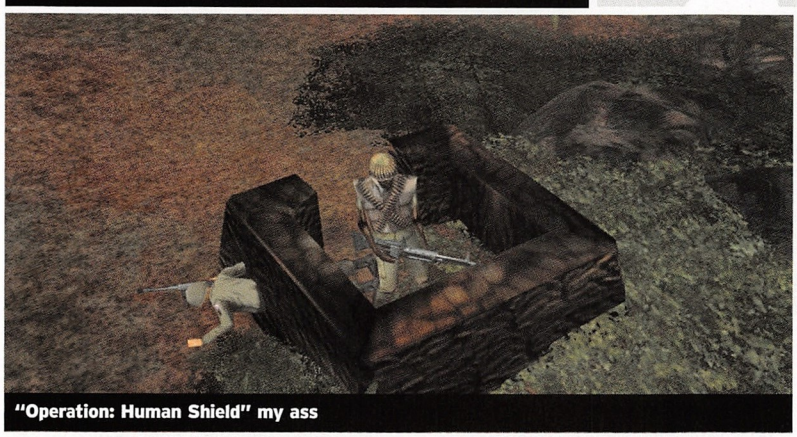
The only time all the elements in this game come together is when they try to strangle one another



Often in the war ziggy-zag lines were helpfully painted on the ground to aid US forces



There's something moving up my pant leg


"Operation: Human Shield" my ass


Fine I'll kill it, See, it's just a spider can me move on now?

several objectives, but they inevitably boil down to a consecutive series of seek and destroy missions.

Do Over Tactics

Every mission makes you utilise all your resources so you can get through with very little, if none, to spare at the end.

bow. This may be realistic but leaves you with a nasty dilemma.

Your M16 squad provide a lot of firepower so you can't afford to lose them through scouting, if your hero dies that's the end of the game, and if you have a specialist unit you're going to need them or have to face almost impossible odds. The question, then, is, who is meant to scout in this game? Whatever choice you make in this game feels more like a gamble than a strategy.

Then again, strictly speaking, Platoon isn't a strategy game - it's tactical. Troops aren't carried between missions, nor is there any base building or troop production.

Players get to control the main character, Lionsdale, plus a squad of five troops with M16s and a specialist or two, such as an Engineer, Sniper, Grenadier or Medic. There are a few missions with a bigger roaster, which are more fun, but they are pretty rare.

All the missions are layered with

Since scouting is almost impossible - as the VC seem to have better vision through the trees and definitely have more units sweeping the area and call out to friends - the only way to get through missions is to know where the VC are coming from. You have to decide which path offers the least number of ambushes and which areas you can actually use for flanking without running into more hiding troops.

As you may have guessed, the only way to know these things is to have run into them before and die after attmepting the mission a number of times before.

To make matters worse, you can't save the game during missions and your troops are completely mindless. As the basic premise of the game is about flanking and being outnumbered, it's frustrating that your troops don't try to see who's shooting them.

Another problem is that your key M16 squad acts as one entity. That means they all face the same way so if they come under fire from two directions you have to turn and shoot at one and ignore the other. There's also no indication how much damage is coming from each side. If you look one way and then the other, you spend an ungodly amount of time not returning fire and just taking losses.

If you send Lionsdale or a specialist to cover the blind flank, you have no way of knowing, until it's too late, whether you are using a hammer to swat a fly or if you are going on a suicide mission.

Jungle War is Hell

I understand that the horror of the Vietnam War was all about ambushes, low visibility and hidden traps. Strangely, like the real thing it's not much fun. These elements remove the ability of players to formulate effective strategies - beyond crawling for cover and blind flanking - without having to learn the map by restarting.

That doesn't assist you in your struggle to survive the tour of duty. Multiplayer avoids some of these pitfalls but still suffers from the lack of tactical information.

All in all, Platoon has all of the elements of an addictive RTS game; the only problem is that the only times they come together is when they try to strangle one another.

Specialist Units

Platoon gives you access to a large number of specialist troops like the Commando, LAW unit, Grenadier, Engineer (for minesweeping and frag grenades), Sniper, Medics and M60 machine gunners for specific missions.

Each has a dramatic effect on your capabilities and each is needed for the missions they are assigned to.

It would have been better if the player was able to exercise some atunomy and choose the units for missions, but that would have required more tactical flexibility then Platoon can muster.

Timothy C. Best

RATING

PC PowerPlay PASS

FOR

- Nice terrain
- Semi-realistic units
- Layered missions

AGAINST

- No friendly AI
- Limited strategy
- Dodgy English

OVERALL

Unfortunately, this Platoon sprays wildly and mostly misses the mark

51




3rd of October, 1965

"I'm still thinking about my first real mission. Sorry, I can't get over it so easily. The guy we caught is strange - he doesn't speak, doesn't eat -everybody senses he has information. But what could it be?

I got my first letter from my dear Beth! I am happy that she is alright, but she misses me very much. She had a checkup and it looks like our little baby will be born one month earlier than previously thought...it is very frustrating that I can't help her from here."



US soldiers' first attempts at cooking were often disastrous

Jurassic Park: Operation Genesis

Developer: Blue Tongue Software ■ **Publisher:** Universal ■ **Distributor:** Vivendi ■ **Price:** $89.95 ■ **Rating:** M15+ ■ **Available:** Now

Not quite 208 million years in the making, but still pretty good

SYSTEM

NEED
P3-400
128MB RAM
16 MB 3D Videocard
700MB HDD

WANT
P3-800
256MB RAM
64MB 3D Videocard (GeForce 3 or better)
1GB HDD

MULTIPLAYER
No

ONLINE
www.goldblum.com
Why not send a "Goldblum-O-Gram" to someone you love which includes your favourite picture of Jeff Goldblum accompanied by some music and a heartwarmng message? Because you're not retarded, that's why.



Ah yes, the raptor cage. Don't let this one fall into disrepair


Is that a real dinosaur or a blow-up novelty visitor centre dinosaur?

CLEVER ENGINE

Probably the most impressive thing about the Operation Genesis engine is the seamless way in which it changes perspective. Click on a car, helicopter or balloon and the game will transition to a third person driving/flying mode. If you need to take a photo or shoot a dino it will switch to a first person view, complete with mouse look and zoom. If you want to check out your viewing ports and towers to see if they have a good view of the action, simply enter one and you'll be switched to a first person locked mouse-look mode so you can see exactly what the tourists do.

Whilst it's not the first game to use the lucrative Jurassic Park licence and be set in the park simulator genre (that honour goes to Jurassic Park 3: Park Builder), Jurassic Park: Operation Genesis is far and away the most successful. Players take the role of a new park administrator for the latest tourist trap in the Jurassic Park franchise. Unlike normal administrators, you're a hands on kind of person so it's up to you to send teams to archaeological digs to find fossils, landscape the island, plan tourist attractions, set prices and occasionally strap on a gun and take out the reptilian trash.

Strangely enough, for a game based around a highly successful movie franchise about dinosaurs, the giant prehistoric beasts are the building blocks for Operation Genesis. Everything you do revolves around the enormous beasts. As is standard in the tycoon genre, players can work their way through a tutorial, slowly learning how to build and maintain a park, or can jump in the deep end and hop straight into the Operation Genesis mode and build the island and park from scratch. Either way, you'll start with some land, some seed money and little else. From then on it's up to you to build enclosures to hold the beast, hatcheries to grow them, the correct feed dispensers and enough DNA harvested from fossils or amber to begin nurturing some livestock.

Once you've got a few dinosaurs you can open the park to visitors and, hopefully, start to recoup your losses. This may sound pretty standard and for the most part, you're right - make some good attractions and build enough amenities to keep the crowds happy and you should be successful.

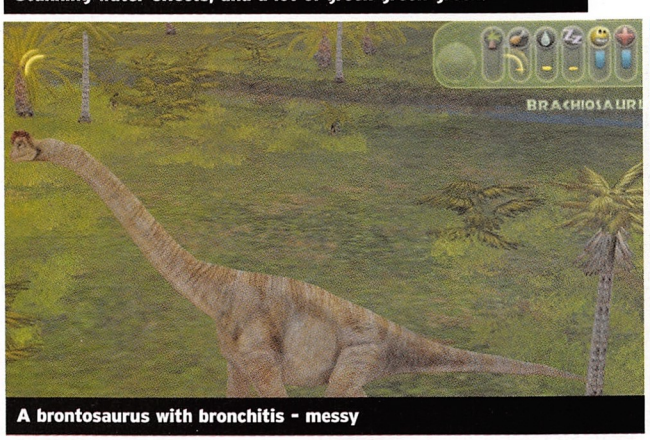

Stunning water effects, and a lot of green green green!

Save me, Jeff Goldblum!

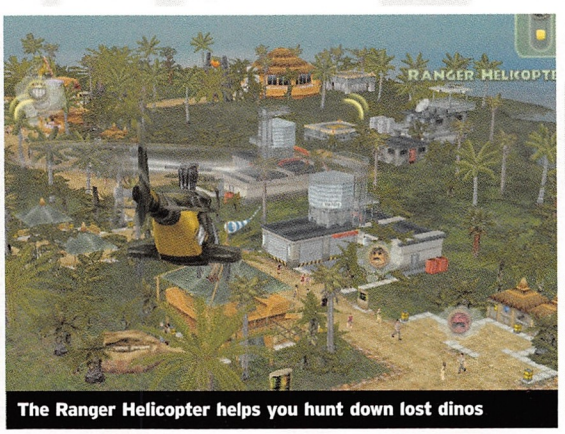
Taking care of dinosaurs is a hoot, but where Operation Genesis really stands out is its small touches. On occasion (usually more often than you'd like) the player will receive an urgent email from the park ranger or security officer or park vet and you'll spring into action. At different times you'll have to winch stranded tourists to safety, kill out-of-control predators and tranquillise sick dinosaurs until a vaccine is researched. During these action elements the player flies around in the ranger helicopter, switching between a third person mode to rescue people or a first person mode to shoot. By breaking up the routine of park maintenance with action elements, Operation Genesis really breathes some new life into a genre that has become predictable.

The fun doesn't stop there. Players can also make money and add to the fame (and, hence, the tourist appeal) of the park by building a hot air balloon or land cruiser attraction, taking control of the vehicle and taking photographs to sell to various magazines. If you think taking care of a fully-grown and rather angry Tyrannosaurus Rex sounds like a challenge, then you should try taking a picture of a small, fast moving herd of Gallimimus whilst hanging from a hot air balloon.

Before anybody decides to judge Operation Genesis as yet another park sim (Theme Park Tycoon, Rollercoaster Tycoon, etc) they



A brontosaurus with bronchitis - messy



The Ranger Helicopter helps you hunt down lost dinos



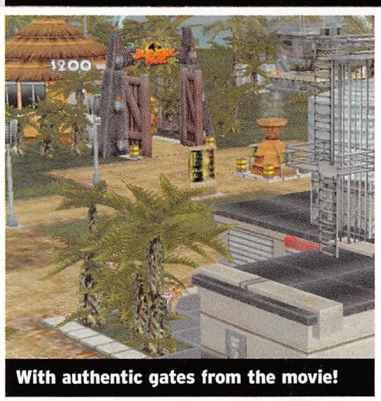
That is one lonely looking burger joint



Bronty hits the deck - done in by chicken flu

BREED, MY PRETTIES

You have to hatch and look after 25 different dinosaurs, but first you have to procur dino DNA, which is not as easy as it sounds. The player has to find a fossil with viable DNA to extract, which can either be bought from the fossil dealer or be found in archaeological digs. Once the fossil is chosen, the DNA has to be extracted at the genetics lab. The player needs at least 50% of the dinosaur DNA to hatch that breed, but dinosaurs with anything less that 100% DNA will have a drastically shortened life span.



With authentic gates from the movie!

should take into account the sheer amount of mini-games that make up the J-Park 'Mission' mode - enough to be considered a game on their own.

Whilst the training and Operation Genesis modes revolve around building a successful theme park and taking care of the day-to-day tasks, the mission mode charges players to perform all manners of action oriented tasks ranging from taking photographs of dinosaurs to prove they are real to flying around a park in a helicopter trying to kill all of the out-of-control carnivores before they make a snack out of the President of a fictional Eastern European country.

Unlike the Easter eggs you come across in many other games, all of the mission mode mini-games are fully polished and, while they are not as fleshed out as the main game is, they do have enough depth to make you want to play them more than once.

Life finds a way

Operation Genesis is an absolute show pony in terms of the overall look. The proprietary graphics engine does a beautiful job rendering the lush jungles and giant thunder-lizards. Hell, the stunning water effects warrant the purchase of the game alone. However, it's sad that the beautiful effects also serve to highlight the one true weakness of the game - outside of the actual dinosaur enclosures there's no real variety between all the parks you build.

For starters, there's only one building aesthetic available. The garish red and yellow 'wood' structures from the first movie may not be such a bad choice if, at least, there were others to choose from.

The other problem is the modest number of buildings. If you include the entrance, there are maybe a dozen possible buildings and, of which, only five are attractions.

Hopefully, we can look forward to either an expansion pack or freely downloadable upgrade some time in the near future which will add more buildings and attractions, and colour schemes. Addressing these issues will the longevity of the title.

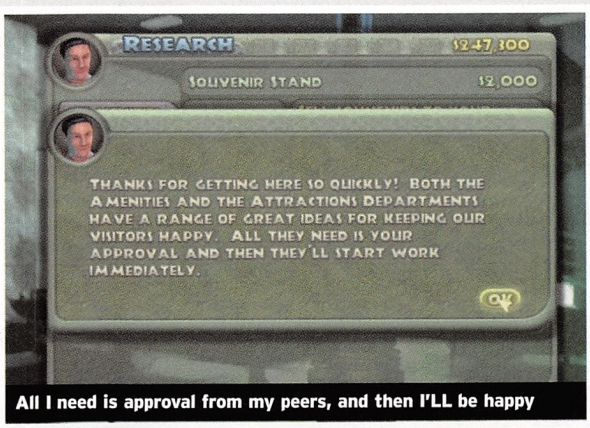
Sound wise, Operation Genesis is a bit of a mixed bag

While it's not the first game to use the Jurassic Park licence, it's far and away the most successful

and ranges from the great film soundtrack and dinosaur samples to some repetitive and rather annoying voice samples that announce which park operative is currently trying to email the player.

Jurassic Park: Operation Genesis may not be a total revolution in the tycoon games, but it's definitely a breath of fresh air in what could otherwise be considered a staling genre. The combination of park management and action elements is guaranteed to keep players on their toes and means that, no matter how big and successful your park gets, you're only one bad shot away from disaster. Australian developers Blue Tongue Software deserve congratulations for restoring our faith in licence games.

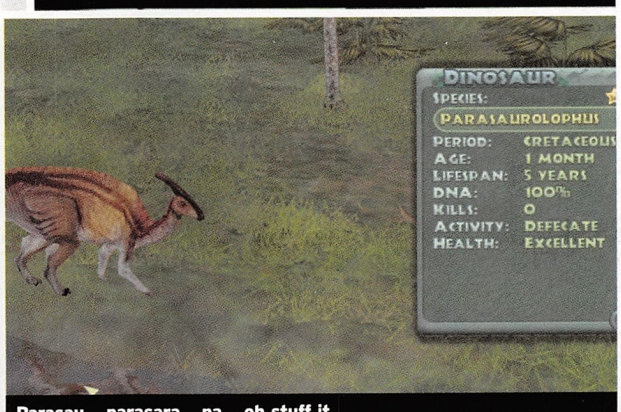
Daniel Wilks



All I need is approval from my peers, and then I'LL be happy



The floodwaters are rising! No wait, that's the drinking trough



Parasau... parasara... pa... oh stuff it

RATING

PC PowerPlay GAME OF DISTINCTION PC PowerPlay

FOR

- Looks great
- Action elements
- Dinosaurs!

AGAINST

- Not enough buildings
- Annoying voices
- Limited options

OVERALL

While it may not seem logical, the combination of action and tycoon works an absolute treat.

82

NASCAR Racing 2003 Season



Developer: Papyrus ■ **Publisher:** Sierra ■ **Distributor:** Vivendi ■ **Price:** $89.95 ■ **Rating:** G ■ **Available:** Now

Redneck racing at it's most superlative



NASCAR Racing is not only the fastest growing sport in the US, it is also one of the most dangerous. What was once a pastime confined to the deep south now generates big dollars and draws massive crowds all over the US. It's not surprising, really. The sight of forty madmen driving at suicidal speeds in over-powered steel bricks, bumper-to-bumper and door-to-door is really quite a spectacle - even if they are just going around in circles.

Did someone say "realistic"?

Papyrus' gaming forte is the unbelievable level of realism their titles boast. The driving physics in NASCAR Racing 2003 Season (NR2003S) feels so realistic the only thing missing are the G-Forces; though this can be achieved to a small extent with a force feedback wheel. Even professional NASCAR drivers train with (and vouch for) Papyrus' games to learn tracks and go for practice runs when the real thing is unavailable.

Each of the twenty-something tracks in NR2003S have been modelled using actual blueprints of their real-world counterparts, and the development team has even gone so far as having scrutinised the real-world tracks featured in the game and have ensured that every bump and crack present was also in the game. This level of detail is bordering on neurotic, and will probably have most non-hardcore NASCAR fans pondering about the effort.

SYSTEM

NEED
P2-450
64MB RAM
16MB Videocard
750MB HDD

WANT
P4 1.5GHz+
128MB RAM
32MB GeForce2
FF Wheel & Pedals

MULTIPLAYER
Yes

ONLINE
www.nascarcafe.com
Enjoy some NASCAR-iffic fun! Taste the fried cheese and supercharged chilli then peruse the NASCAR themed clothing line so that you too (and your partner) can look like this:



Not for Sunday drivers.

A NASCAR has enough horsepower at the rear wheels to dig holes in tarmac. They are just as fast as Formula One cars, but they're over twice as heavy and their tyres are about half as wide. Needless to say, that amounts to quite a handful at over 300km. A NASCAR is extremely difficult to drive in real life, and make no mistake, this means they are just as challenging in this game.

But don't get scared just yet! Practising is quite fun, and the in-game driving lessons are invaluable. Once you get the hang of it, white-knuckled, adrenaline-pumping racing is guaranteed, the likes of which is rarely seen on PC (and never on console beacause of arcade physics).

So what's new?

There aren't any singnificant changes since the 2002 edition, but sim-racing fanatics can justify splurging on this latest version, if not for the extra features alone, but because this will be Papyrus' very last NASCAR game they will make. If you already own 2002 Season, or even its predecessor, NASCAR Racing 4, but are not a total NASCAR devotee, then you might want to skip NR2003S, as the meat of the title remains similar to those versions.

Despite this, there are some quite nifty graphical enhancements, such as sun glare and a windshield that gets dirty as the race progresses. The game mechanics have also been tweaked slightly from previous versions, for example, smoke now hangs in the air for a substantially longer period of time before dissipating and the track has now been remodelled for a realistic 'track bumpiness'. However, actual driving physics has not changed significantly, so 2002 Season owners will barely notice the switch to 2003 Season.

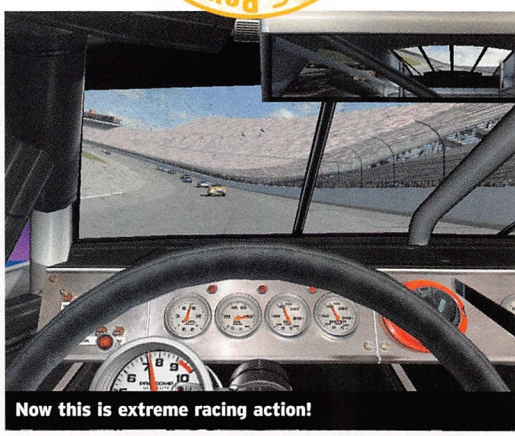
It's disappointing that the helpful track guides that where present in NR2002S have been inexplicably removed, but fortunately, all the other in-game tutorials remain.

For those new to Papyrus' NASCAR games, the menu system is simple and easy to navigate. The player has the choice of 'Testing Session', 'Single Race' and 'Championship'. Needless to say, a 'Championship' takes you through an entire NASCAR Season of racing, but only grizzled veterans will be using this option, as it takes exhaustive practice (think in days, not hours) to learn just one track, let alone the whole twenty six.

This may surprise novices, considering most of the tracks are just big ovals. How hard could it be to turn left? You'd be forgiven for thinking "not very", but try it with ninety metres of bitumen per second flying underneath a car with a technological complexity that reached its peak sometime in the 1960s, and doing it all an inch off the next guy's tail. It won't take long for beginners to realise that each track is a whole new can of worms. Mastering even the most docile looking oval - not to mention the two road courses - is quite a serious endeavour.

MULTIPLAYER RACING AT ITS BEST

The AI in NASCAR 2003 competes with the best any other racing game can offer, but if you truly want an authentic challenge, only multiplayer racing will suffice. NASCAR 2003 allows you to join public races or host and join private competitions. There are tons of online NASCAR leagues, so if you're really serious about your cyber-driving, a quick Google search will have you signed up and ready to participate in weekly races with an organised bunch of like-minded individuals. However, make sure you know your stuff before you join a league - driving backwards around the track is funny only when it's the AI at fault.



Now this is extreme racing action!



I'm about to become involved in this in a big way...



Trading paint and winning a race rarely go hand in hand



Hang on! They're turning right! What peversity is this?

powerful replay editing studio which allows you to make your own highlight reels, including custom sounds for commentary, and graphics for screen overlays, such as arrows or "spotlights". This is a unique and interesting edition which will keep wannabe directors busy for hours.

Apart from the aforementioned new effects, the level of detail has moved up a notch with options for new shadow effects where structures and cars can now cast shadows onto other cars and into the cockpit, but this is enabled with considerable cost to frame rate.

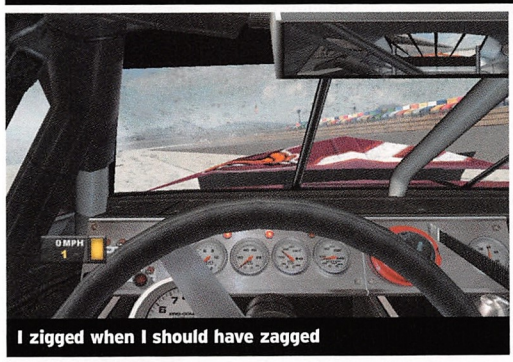
As with all Papyrus games, the sound effects are top notch and if you pump up the volume and turn on the subwoofer, these gurgling beasts will bring a smile to the face of any true petrol head.

It is simply no exageration to claim that 'NASCAR Racing Season 2003' is the best, most realistic and highest quality racing simulator available. As far as NASCAR games go, it leaves competitors choking on the exhaust fumes and waving the dust away from their eyes. NASCAR 2003 Season is simply a must-have for any sim-racer who takes the genre seriously.

Victor Webster

SO WHAT'S WITH ALL THE BLOODY OVALS!?

NASCAR Racing draws much criticism from the unfamiliar due to the abundance of oval tracks involved. What's the big deal with turning left? The thing is, NASCAR is all about speed, and corners slow you down - pure and simple. The effect of racing a stock car is akin to swirling a marble around a bowl - it's all about speed and momentum (with bonus spectacular crashes). Next time someone scoffs at the simplicity of driving in circles, challenge them to have one shot on NR2003S (preferably starting in the middle of traffic), and you're bound to have the last laugh.



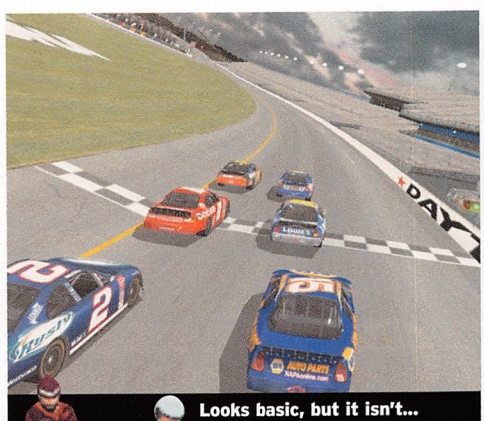
I zigged when I should have zagged

Hick-town artists rejoice!

NR2003S comes packaged with an extensive paint-shop that not only allows total customisation of your car's paintwork, but also your pit crew's uniform and your pit truck's paintwork. A uniquely identifying custom paint job complete with bogus sponsorship, such as "Bigbutts toilet seats & co.", is a must-have for any staid online racer. The beauty of the paint shop is that all the necessary decals and shading can be added with a single click of the mouse, making even the most amateur and unskilled paint job look professional.

As with the 2002 Season, NR2003S also comes equipped with a




Looks basic, but it isn't...



...this is one of the most strategic racing forms



Stacker 2? That's an ominous name...

RATING

PC PowerPlay GAME OF HIGH DISTINCTION

FOR

- Unmatched realism
- A+ Sound & graphics
- Authentic models

AGAINST

- Same as old versions
- Hardcore only!
- No more track guides

OVERALL

The racing sim by which all others are judged. Simply outstanding.

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Shadow of Memories

Developer: Konami of Europe ■ **Publisher:** Konami ■ **Distributor:** Inforgrames ■ **Price:** $89.95 ■ **Rating:** M15+ ■ **Available:** Now

Turn back the hands of time and mod your destiny

SYSTEM

NEED
P3-450
64MB RAM
16MB Videocard
700MB HDD

WANT
P3-700
256MB RAM
64MB Videocard
Gamepad

MULTIPLAYER
Nope

ONLINE
http://faculty.washington.edu/chudler/chmemory.html
There's the idea that the more work you do with your brain, the less likely you are to suffer from degenerative brain conditions later in life, so stave off dementia for a few years longer and do these memory tests.

Death is coming for Eike in a way that would make the kids from Final Destination proud. Each of the game's ten chapters begins with our hero being murdered and plucked out of time, by the mysterious and exotic Homunculus force, and sent back half an hour.

Although the force has the power to save him, only Eike can alter his own fate.

In the first few chapters Eike cons people into the town square, stops a tree being planted and prevents a fire and with each success he avoids one nasty death.

Superficial changes like these only put off the inevitable. Eike will only be safe when he has put together enough clues and changed the past enough to completely remove the danger as a seed before it grows and blossoms.

Time Keeps on Slipp'n

One of the most interesting elements of the game is that it runs in real-time (kind of like the TV show, 24-Hours), and the time in the past that slides by is mirrored with moments lost in the future. As past events affect the future, Eike must modify elements in the past to prevent his murder.

Jumps can go back as little as half an hour, to 1979, 1902 and even 1580. In addition to saving his own neck, Eike also has the power to help others by completing little side quests.

The mechanics of this are surprisingly simple. The player's time travel device can only allow Eike to go back to specific times to adjust his personal history. Once there, you can investigate by talking to people, taking notes and finding items to use, such as ladders and mobiles phones, when the time is right.

Much about the solving the puzzles is finding the right people that can help Eike and collecting their strange words and sentences which seem incoherent at the time, but gains relevance as you jump forwards and back.

Fond Memories

The consequence of altering history is the key theme in Shadows of Memories. It's a lot of fun seeing pictures in the museum reflect changes you've just made in the 1500s. Equally, the atmosphere of the clock ticking down and the slow layering of the physics-defying plot creates an interesting and engaging experience.

On the other hand, these elements only serve the story which is to the detriment of player interaction. The only components that are interactive are the clues given, when the player can more or less affect the outcome of the story.

Its origins as a PS2 game is apparent in some of the background textures, which look a bit rough and muddy. The cinematography and characters, however, make up for any sins made by the transfer.

The controls are fiddly indoors, but that's easily forgiven since you spend most of your time outdoors supported by mouse.

Shadow of Memories isn't a great technical achievement, but it is a unique adventure experience filled with tension and a believable sense that time is slipping away. It would be worthwhile for adventure gamers to give it a look.

Timothy C. Best

RATING

PC PowerPlay GAME OF CREDIT PC PowerPlay

FOR
Intriguing time travel
Story-line
Real-time

AGAINST
A bit short
Limited interactivity
Fairly linear

OVERALL
A curious and uncomplicated adventure game well worth a spin

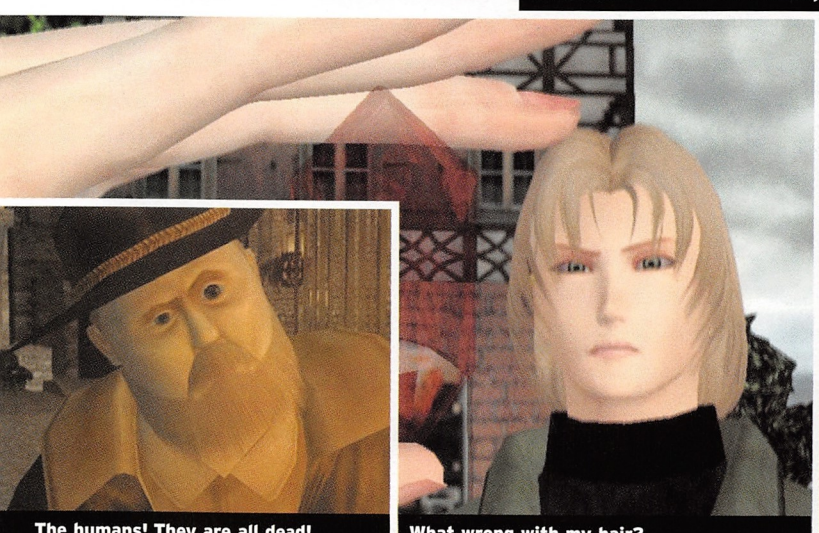
69

LIFE CYCLE

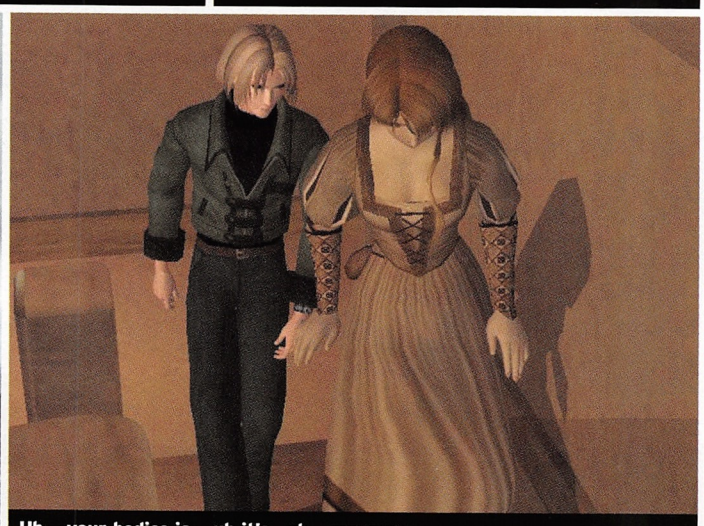
Although it is true that an experienced gamer could wind through Shadow of Memories during a day off, the game keeps on giving after you have completed it the first time, much like unravelling one knot after another.
If you take the option to start again, you'll find new areas unlocked and the game will be altered by Eike's actions in the past cycle of death and rebirth.
There are five endings in all and with each time you'll get a few more puzzle pieces and a more complete picture of the town's bizarre history, and more importantly, Eike's mysterious past.


An awkward love scene? In a Japanese-style RPG?


Weep! Gnash! Final Fantasy X is no more!


The humans! They are all dead!

What wrong with my hair?


Uh... your bodice is... uh it's.. uh... mmmmn...

Silent Hill 2: Director's Cut

Developer: Konami ■ **Publisher:** Konami ■ **Distributor:** Inforgrames ■ **Price:** $89.95 ■ **Rating:** M15+ ■ **Available:** Now

Is it a nasty hoax or a visit from the dead?

Most people would be put off by a town perpetually smothered in fog. Most people would turn around if they discovered the only way into town was to drive through the graveyard. Most people would heed the warning of the mentally-unsound girl who lives in the graveyard and leave because something is wrong with Silent Hill.

But James Sunderland is not most people, and something stronger than foolhardy curiosity has driven him to Silent Hill: a simple note from a loved one. A loved one who died three years ago.

James wasn't able to take his late wife, Mary, back to Silent Hill where they spent precious days together before she passed away, but now it seems she's come back from the dead and is all alone at Silent Hill waiting in their "special place".

Silent Hill 2 is a survival horror game with all the shotguns, meat cleavers, fog and a paranormal mystery that could be a hoax.

Right and Wrong

Silent Hill 2, like its predecessor, hammers in the eeriness and wrongness of a setting that's more nightmare than real-estate and more about solving puzzles and exploring locales than destroying ungodly creatures who haunt the town.

Just as the Fresh Prince of Bel-Air said in the song, I Think I Can Beat Mike Tyson, "A good run is better than a bad fight any day."

The puzzles involve a lot of finding keys and opening doors, finding alternate routes around the town and following up pointers written in the diaries of mentally unbalanced survivors who are found around town, but whose motives are not clear.

The puzzles are usually logical, but there are few irrational tasks that can drive a player nutty. One requires you use a six-pack of juice cans to knock down an object, which is just out of reach, down a garbage chute. Unfortunately, you are also carrying an aberration-whacking plank that would do a better job, but you can't use.

The atmosphere in the game is not as disturbing as Silent Hill 1, but the storyline has more clarity, despite the complexity of the mystery, which won't leave you confused about what you just played and why.

A little more light is shed on proceedings by the short bonus game, Born from a Wish, which follows the tale of one of Silent Hill's residents, Maria, who lives in the graveyard. This was interesting and I was left with the impression that many of the characters in Silent Hill may even be an illusion born from Jack's dissolving sanity.

Transition

Like the other two Konami games reviewed in this issue, Silent Hill 2 started life on PlayStation 2 before coming over our way to PC. Luckily, quite a bit of work has gone into cleaning the graphics of the game and it offers resolutions of up to 1024x768. The PC version also allows players the choice of either atmospheric cinematic noise or a crisper image. The game definitely looks the part, even if the graphics are a smidge too dated for the PC.

There are also a couple of control schemes to choose from and while they allow adequate authority over movement, there is no mouse support, which is just plain lazy.

Aside from porting quibbles, Silent Hill 2 is a great horror title that belongs in any games collection.

Timothy C. Best

PERSONALITY DISORDERS

The people you run into in the game are just as freaky as the twisted monsters trying to kill you.

They range from dangerously cracked and suicidal teenagers, to delusional truckies, to a mysterious kid who is so smug and arrogant, he has no right to still be alive.

Then you have Maria. She'll accompany you through the desolate town of Silent Hill. She even seems sanely fearful for her life. James could almost trust her, except for the uncanny fact that she looks and sounds like a perfect, yet somewhat vibrant and trashy, mirror image of his dead wife, Mary.

Is Maria a hopeful twist of fate or just an evil and deadly temptation?



SYSTEM

NEED
P3-700
64MB RAM
32MB Videocard
1.8GB HDD

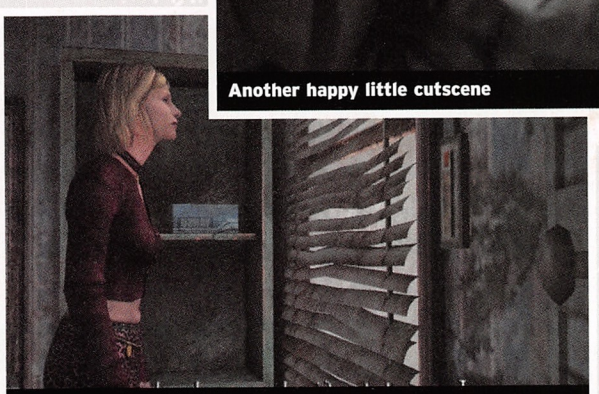
WANT
P3 1GHz+
256MB RAM
64MB Videocard
Gamepad

MULTIPLAYER
No

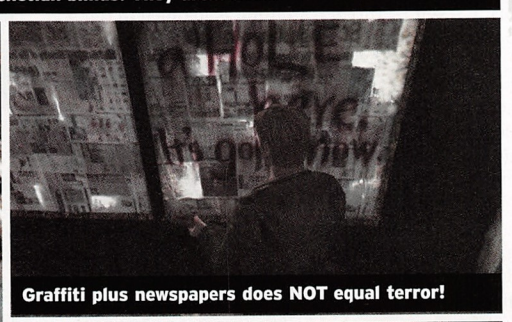
ONLINE
www.silent-edge.org
A site advocating against explotation and abuse of figure skaters. Dang! There's a website for just about everything!



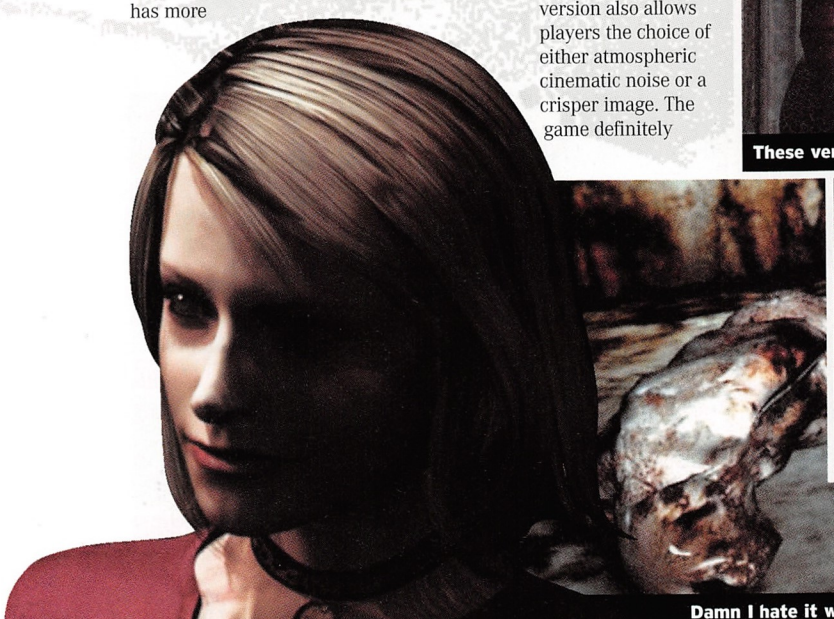
Another happy little cutscene



These venetian blinds! They are... alive!



Graffiti plus newspapers does NOT equal terror!



Damn I hate it when the deep freeze blows a fuse...

RATING

PC PowerPlay GAME OF CREDIT PC PowerPlay

FOR
Disturbing
Haunting premise
Atmosphere

AGAINST
Dated controls
Pretty linear
No mouse support

OVERALL
A beautiful and eerie game that's depressing for all the right reasons.

73

Metal Gear Solid 2: Substance

Developer: Konami ■ **Publisher:** Konami ■ **Distributor:** Infogrames ■ **Price:** $99.95 ■ **Rating:** M15+ ■ **Available:** Now

Prepare to be disappointed.

SYSTEM

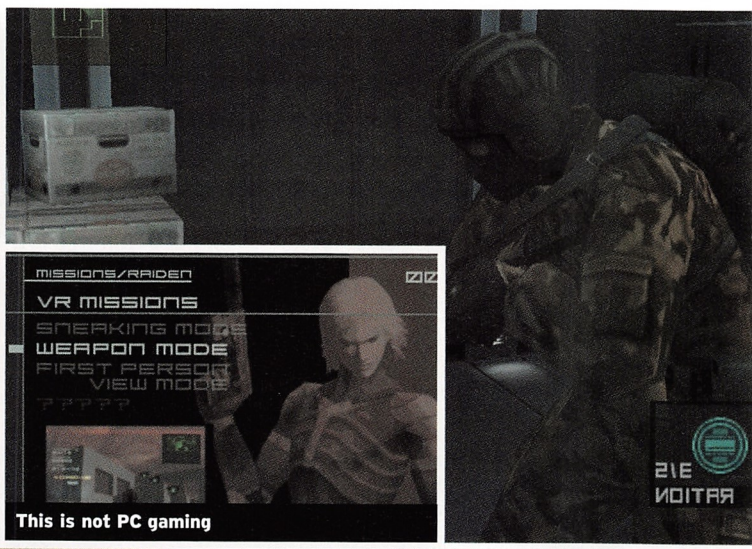
NEED
P3-700
128MB RAM
32MB Videocard
3.9GB HDD

WANT
P3 1GHz+
256MB RAM
64MB Videocard
7.7GB HDD

MULTIPLAYER
No

ONLINE
www.substance.com
Naturally, it's a site chockful of beauty and lifestyle tips.


Ooh I feel sea-sick



This is not PC gaming

The feel and story of Metal Gear Solid 2 (MGS2) on PlayStation 2 is a pinch of Tom Clancy, two cups John Carpenter's Escape from New York, and a sprinkling of X-Files - all told with amazing confidence and artful style.

It's quite a thing to behold. The plot is full of conspiracies, action, cool gadgets, and serpentine twists. At times, Hideo Kojima and his crew of developers get a bit carried away and players are bombed with cut-scenes which play for more than ten minutes, but luckily these are all pretty fantastic.

When you come to gameplay, it's equally impressive. Snake can crawl, drive roll, pop out, shoot around corners, duck back behind cover, bust impressive martial arts throws and strikes, sneak up from behind and silently choke guards or break necks. You can even switch to first person mode to target enemies around shields, blow away their radios to prevent them from reporting your position, and shoot out lights.

The design shows occasional touches of true genius and it all works together like a smooth crack team of Navy Seals.

On the PS2 this is without a doubt, a High Distinction, Gold Award game. On PC however it's a vastly different story.

Spending so much time creating such beautiful work, Konami has obviously run out of steam for the port. It's simply three things: lazy, lazy and lazy.

Mouse Hunt

The biggest offender here is the control scheme. If you don't have a gamepad you're in for a world of woe. The main missions and menu screens have no mouse control at all. To start the game you are asked to "Press Start". Just to make things more confusing, 'Start' doesn't translate as 'Enter' (sigh). 'Enter' is the 'Cancel' command, which is absolutely counter intuitive for PC users.

So, the 'Start' key is actually the 'Tab' key by default. Luckily, you can remap all of the keys to something more reasonable, but that doesn't help you much when the game tells you to target "with your right thumb stick," or "to use an equipped item press the 'A' button". Note well: the 'A' button is mapped to the 'Z' key by default - and, oh yes, you can't check this without first exiting the game.

The exceptional graphics have been maintained, however, one problem is how the clarity of the monitor plays against the stylised graphics, robbing it of some charm and leaving a couple of the cooler effects looking like cheap Photoshop filters.

Why, Oh Why?

If the development team gave a little love and forethought to the PC version, the game could have come a long way. Really, how hard is it to change gamepad references to something that makes sense for a PC? Get a friggin' work experience kid in for goodness sake!

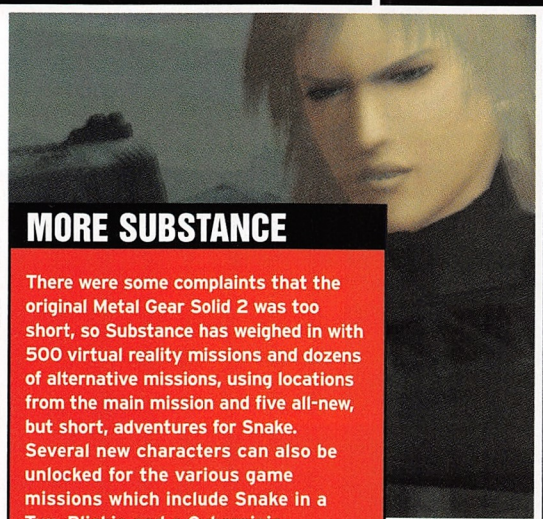
Any research or a whiff of interest would have made it clear that mouse support for third-person action games on PC isn't an option - it's a requirement. With the type of controls in a games such as Splinter Cell or even Thief, the PC would have become the system of choice for MGS2... maybe that was the problem...

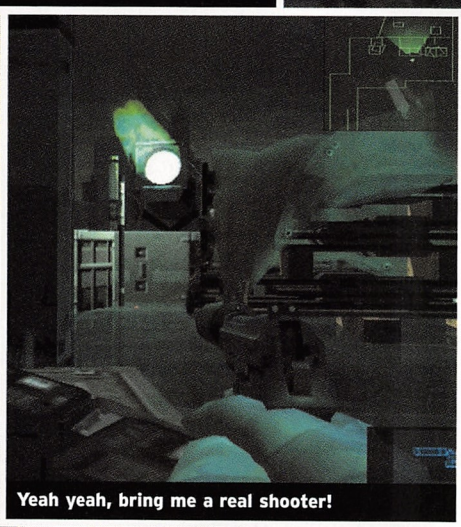
To experience the game's full magic, borrow a PlayStation 2.

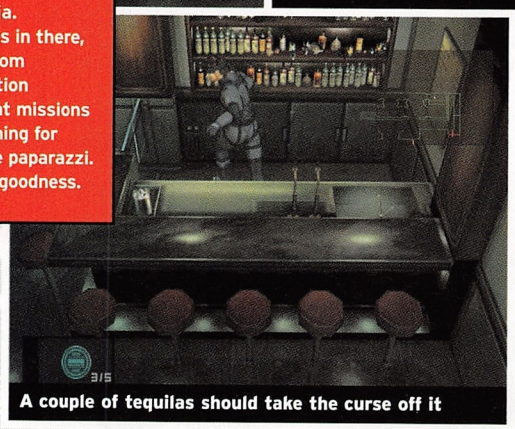
Timothy C. Best

MORE SUBSTANCE

There were some complaints that the original Metal Gear Solid 2 was too short, so Substance has weighed in with 500 virtual reality missions and dozens of alternative missions, using locations from the main mission and five all-new, but short, adventures for Snake. Several new characters can also be unlocked for the various game missions which include Snake in a Tux, Pliskin and a Cyberninja. There are a lot of game modes in there, covering all kinds of tastes from straight out action to infiltration practice. Photographic combat missions should become standard training for anyone seeking a job with the paparazzi. That's a fair whack of Snaky goodness.




Yeah yeah, bring me a real shooter!


A couple of tequilas should take the curse off it

RATING

PC PowerPlay GAME OF CREDIT

FOR
Plots aplenty
Great Atmosphere
Stunning Design

AGAINST
Bad port
7GB install
Illogical PC controls

OVERALL
Masterful game but a punishing direct port. Play it on PS2 instead.

71

Racing Simulation 3

Developer: Ubi Soft ■ **Publisher:** Ubi Soft ■ **Distributor:** Ubi Soft ■ **Price:** $69.95 ■ **Rating:** G ■ **Available:** Now

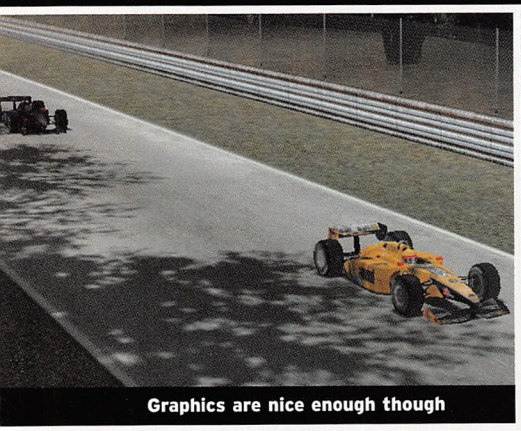
Compete for the F1 title in Iceland... or something



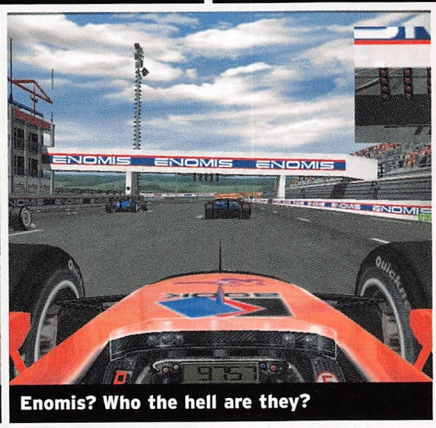
Note the lack of licensing and authentic decals



Yellow good!



Graphics are nice enough though



Enomis? Who the hell are they?



Oh, this is going to hurt



Why pile up if there's no damage model?



THE DRIVING MODEL

The physics engine can't quite compare to what's on offer with GP4 and EA's F1 2002. Firstly, there are no driving aids available to help beginners. You can set sliders for Anti-lock brakes and Slide Control, but you are unable to manually choose how you want assistance with options such as the customary traction control, braking help and steering help you receive from competitor titles. The physics are only just believable, but do offer something for people who want a moderately realistic experience without the headaches of a hardcore sim. Unfortunately, and somewhat inexcusably for a race-sim, there is no damage model featured.

It takes a brave mob to openly compete with Geoff Crammond and EA Sports Formula One 2002, but that's exactly what Ubi Soft are doing with Racing Simulation 3. Ubi Soft do have the required experience with previous Racing Simulation titles so they can pull off a major upset, but with the big boys leading the pack it's going to be an uphill race right from the green flag.

Jacques Who!?

The first - and perhaps the biggest - notable downer to Racing Simulation 3 (RS3) is that it doesn't hold the license for any real Formula One teams or drivers. Sure M. Hilkonen and J. Veilleure are there, but it's not quite the same as the bigger competitor titles. Likewise, the tracks are not real either. Many of them are set in locations such as Iceland and Korea, which in reality don't host Formula One races. Despite this, some of the circuits actually have been modelled on real-life tracks, but like the drivers, teams and sponsors, their names are fake. The New Zealand track, for example, is almost exactly the same as the Melbourne Formula One circuit.

RS3 also features an editing tool that allows you to enter real drivers' names, but why bother when you could just buy Geoff Crammond's Grand Prix 4, or Electronic Art's version of the genre instead? This feature will make most F1 fans shy away.

Editing is needed

Well, RS3 does offer a few little things that other titles don't, such as the editor that comes shipped with the game. This certainly doesn't make the game, but at least it's something to fiddle around with. RS3 also has a Scenario Mode which allows the player to start mid-race in a variety of interesting situations. For example, one of the scenarios asks you to finish the race in a certain position, despite the fact that you're running on the smell of an oily rag with only a few laps to go. Scenario Mode isn't exactly ball-tearing, but it's certainly something that the competitors don't offer.

RS3 supports multiplayer gaming over a LAN, the Internet, or even split-screen racing on the same machine - an option usually reserved for consoles. Yet despite it's respectable multiplayer capabilities, RS3 remains a game mainly designed for single player racing.

Lookin' fine

The graphics and 3D modelling are satisfactory and driving in the cockpit is reminiscent of Crammond's GP4, but lacking the same degree of polish. Although the graphics are admirable, unfortunately the same can not be said for the sound effects. It's not wholly bad - RS3 does have some stiff competition, after all - but the car engines don't have the correct sonic qualities.

Overall, RS3 is a passable F1 game that doesn't scream "horrible", but fails to contend with it's prevaling competitors. If RS3 did come fully licensed with real-world tracks, drivers and teams, it would still fall short of the lofty heights set by Geoff Crammond and Electronic Arts. Even if the profits made by neglecting official licensing makes for a cheaper game off the shelf, F1 fans should look elsewhere and pay a little more for a quality race-sim.

Victor Webster

SYSTEM

NEED
P2- 300
64MB RAM
8MB Videocard
Internet connection

WANT
P3-500
128MB RAM
32MB Videocard
Broadband

MULTIPLAYER
... or bust

ONLINE
www.cheeseracing.org
Welcome to the international world of professional cheese racing. The Game is played as follows:
1. Each player throws a slice of cheese onto a BBQ.
2. The player who's cheese fully inflates first wins!
The full official CRASS (Cheese Racing Association) rules can be found here - but that is basically it!

RATING

PC PowerPlay PASS

FOR
Interesting scenarios
Editor modes
Multiplayer options

AGAINST
Raspy sound
Unlicensed
No damage models

OVERALL
A great effort against competition, but nonetheless out-classed by other titles.

58

Dino Island

Developer: Monte Cristo ■ **Publisher:** Monte Cristo ■ **Distributor:** QV Software ■ **Price:** $69.95 ■ **Rating:** G ■ **Available:** Now

Adventures in grabbing the interest of fickle tourists

SYSTEM

NEED
Windows (not NT)
P2-300
64MB RAM
16MB 3D Videocard

WANT
P3-866
256MB
32MB TNT video

MULTIPLAYER
Yes

ONLINE
http://www.sciam.com/article.cfm

Remember that inplausible scene in the pile of excrement that is Jurassic Park 3 where Sam Neil uses a part of a dead raptor's skull to talk to the raptors, and they listen to him then talk to each other and then sod off with the eggs? No? You guys didn't watch it? Well according to the shape of the skull, here's what a Parasaurolophus sounds like. Sort of like a giant, maudlin, drunk goose.



RATING

PC Powerplay PASS

FOR
Atmospheric sounds
Original ideas
Bright colours

AGAINST
Unhelpful tutorial
Obscure interface
No attention to detail

OVERALL
It's too complicated for the under 10s, but proved entertaining for the rest of us.

60



They've definitely gone for the 'cartoon' look



The fencing is kind of hard core



I presume those piles are food, not... the opposite of food

So you enjoy watching battles to the death? How about the gradual eating of an animal as tourist spectacle? And would you enjoy seeing an animal deformed through nuclear radiation exposure? If you answer yes to all of the above, then welcome to the G-rated Dino Island. There's all this and more in your own dinosaur theme park, complete with dodgem cars and dinosaur races.

Although playing Dino Island involves a big slice of fiddling around with the genetics of your dinosaurs, you have a pile of more mundane tasks to attend to. This includes keeping an eye on the bank balance, providing attractions that suit visitors to the park and feeding the critters.

In the beginning

Like most tycoon style games, you are presented with a plot of ground, a bucket of money and the opportunity to purchase things you won't find at K-Mart, such as dinosaur eggs, hamburger stalls and a haunted house. You can play in campaign mode, completing set tasks, or in free mode, which might be best done after playing a campaign or two. You should work through the tutorial before playing either. Now, it may be because the review copy arrived with no manual, but even after playing the tutorial I wasn't sure I was much the wiser on how to play. After a frustrating couple of hours, I think most of the ideas emerged, but herbivore dinos still died from starvation in spite of having masses of plant food! Most icons, but not all, have tooltips, but the most obscure screen of all is Options, with little hint of what any of the icons represent.

Moving along

You have a choice of three island types: Polynesian atolls, African savannah and the tropics. Each has a boat docked at the location chock full of passengers who'll come onto your island if it's interesting enough. So to entice them with dinosaurs, you first build dino pens which must be equipped with feeding bowls that provide the right type of food for the animals in that pen. That means you need farms and farm workers, as well as roads and viewing towers. Of course, people vary in their tastes, so pensioners will want nice cafes and flower gardens, while hooligans want meat-eating dinosaurs and haunted houses. Trying to keep them all happy is an important task.



Giant ancient tiddlywinks?



Dinos = cool

The verdict?

The music is ok, but the atmospheric sounds as you zoom in and out of the 3-D world are excellent. The engine seems quite efficient as there is little speed degradation even when you have a lot of objects in a busy park. Loading times can be a little slow, and it coped poorly with a two monitor setup; it didn't quite understand where the edge of the screen was. Other games such as Ghost Recon deal with this problem quite well. Overall it's not a bad game, but hardly at the forefront of its genre. If you're really into dinosaurs you'll be disappointed by the lack of detail and control of the animals, but you might enjoy it more than building roller coasters.

Andrew Calvin

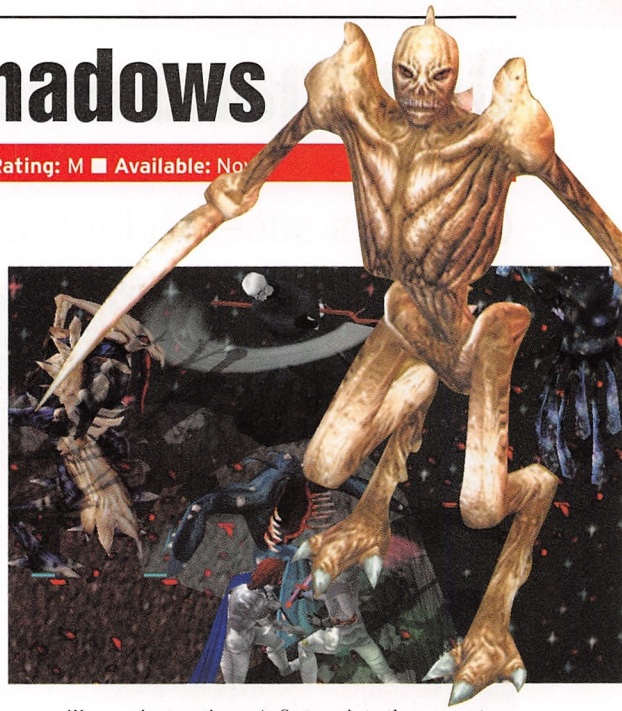
BREEDING IS FUN

When you start out you have pure bred dino eggs. If you have enough money you can buy eggs of different species, although the fun ones are quite expensive. You can gain more money by having lots of happy visitors. Once you've got a few species you can simply cross breed them. This produces dinos of varying sizes and abilities, and that's important when you want to create an interesting show for the crowds. The shows are daily spectacles where a few of your dinos will be pitted against each other in races involving speed, intellect and physical abilities. A tiny sized dino won't be able to jump over a large obstacle, but he may be a lot smarter than a huge diplodocus. Matching dinos to show layouts, that have been prebuilt or custom designed by you, can involve some careful cross breeding or genetic mutation in the lab.

Ultima Online: Age of Shadows

Developer: Origin ■ **Publisher:** EA Games ■ **Distributor:** EA Games ■ **Price:** $79.95 ■ **Rating:** M ■ **Available:** No

Now you can have your very own house



SYSTEM

NEED
P2- 300
64MB RAM
8MB Videocard
Internet connection

WANT
P3-500
128MB RAM
32MB Videocard
Broadband

MULTIPLAYER
... or bust

ONLINE
www.funtrivia.com
Where you can find the answers to questions such as 'What place will you fin the Ultima Weapon?', 'What animal do you need to get the Ultima Weapon?' and 'Who invented the rabies vaccine?'. Just about anything really.

In 1997, Ultima Online became the first game to offer a full virtual world which gamers from all across the globe could access, communicate and live in like a second reality. It followed on the legacy and popularity of a thirteen game series that was spawned in 1980. A true survivor, Ultima combines both traditional RPG elements with the scope of Dungeons & Dragons providing an enormous amount of history and depth for its online incarnation. An immediate success, over the last six years the world has been continually enhanced and increased, eventually spawning Age of Shadows, the fourth addendum to the Ultima Online mythology. The question is, can an experience crafted from a six year old engine still deliver, or is Britannia a world doomed to suffer the same fate as Alderaan? (It's a Star Wars thing - Ed)

To those who have not participated in the Ultima experience, Age of Shadows is not simply an expansion pack, but contains all the components that have been released before it - it's a standalone title. Thus, it is a good place to kick off an adventure which is not only a load of fun, but highly addictive too. For the veterans, Age of Shadows offers a lot more than simply exploring the new celestial land of Malas. There are two new professions (Paladin and Necromancer) to master, a custom house-building tool, new monsters, new spells, thirteen new combat attack moves, a massive number of magic item combinations, new weapons and the biggest Ultima Online dungeon yet seen. There is also room for 40,000 new buildings, which means those who have yet to build their private virtual holiday house will now have the opportunity.

Reality bites

What has kept UO separate from the hordes of online experiences that have risen in its wake is the ability for gamers to possess their own house. Age of Shadows builds on this, literally, with its new custom house building tool that allows players to actually create their house, rather than simply buy it. Although a lot of the other enhancements are standard fare for an expansion pack, the house manipulating tool is the addition that will have UO experts salivating over the freedom of expression the game now offers. The good news is it all works smoothly, grafting the successful techniques of sources, ranging from The Sims to Photoshop, enabling relatively hassle free assembly.

The other major improvement is the inclusion of context menus. Where its peers laboured away with typed instructions, AoS steps into the present utilizing the mouse for almost all the commands and providing pop-up descriptions of the various clickable objects. The interface could still do with a bit of tweaking, but UO old boys will feel new again in a superior system. It is a shame that a health bar still isn't available for your character, so hopefully this, and the first-person option to evolve UO from its Diablo-esque isometric experience, will arrive on the next inevitable addition.

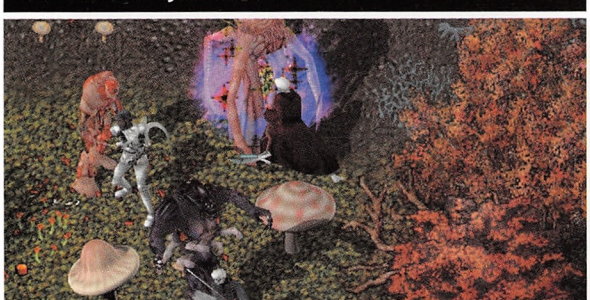
Old, but not dated

Age of Shadows is an excellent expansion that doesn't outdo its predecessors, yet simply blends into the bigger picture, enhancing the UO gaming experience and rejuvenating the aged title. There's still room for improvement, but AoS is a must buy for the experienced, a solid stepping stone for the uninitiated and a healthy alternative to Everquest. And Lord knows we need one.

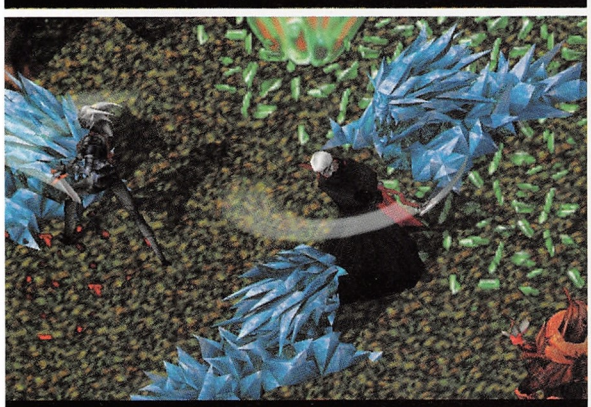
Chris Stead



Now with added giant mushrooms



Dated graphics hide a superior online experience



These things for instance, aren't friendly



It's not perfect, but it feels healthier than EverQuest



House building is surprisingly cool

RATING

PC PowerPlay GAME OF DISTINCTION PC PowerPlay

FOR
House building tool
Slicker interface
Two new professions

AGAINST
Interface not perfect
Isometrics look dated
Control concerns

OVERALL
A fine expansion with plenty of worthwhile additions and constructive interface improvements.

79

Command and Conquer: Generals

Developer: EA Pacific ■ **Publisher:** EA ■ **Distributor:** EA ■ **Price:** $89.95 ■ **Rating:** MA15+ ■ **Available:** Now

Generals sucessfully hits targets as a multiplayer.



Early harrassing sorties by the GLA can sometimes backfire...

SYSTEM

NEED
P3-800
128 MB RAM
32 MB Videocard
1.8 GB HDD
WANT
1.8 GB CPU
256 MB RAM
GeForce 3 or greater

As much as Generals is a singleplayer game you can embark on and have fun, it is pretty clear that the focus is on multiplayer action. Indeed, as you begin to get into this part of the game you will find yourself looking at the game in a fresh light and appreciating the superb sense of unit balance, which is obvious from the beginning. EAP have done a noteworthy job ensuring that multiplayer fun is as good as most online RTS which feature three factions and are brilliantly balanced for multiplayer shenanigans.

The US best suit classic Command and Conquer strategists while the Chinese are brilliant for heavy hitting rushers, and the more lightly armed GLA are just the ticket if sneakier guerrilla-style warfare fries your burger.

Cross-head

All three sides have definite strengths and weaknesses, but there is one unit we think is perhaps too powerful, Ms leather-clad Black Lotus. Chinese players are using her a lot to catch you napping with often frustrating results. The Chinese are currently a little stronger than the other two sides online, and are currently winning more games for online players with stats of 36% wins, compared to 32% each for GLA and USA. However, there are tactics which you can employ to throw the Chinese off-guard, most of which rely on sneaky nimble counterattacks and evasive manoeuvring.

US Humvees, Rocket Guys and Tomahawks, as well as GLA Rocket Launchers and Jeeps can be very useful against the seemingly all conquering Chinese Overlord tank - just make sure you stay at a safe distance.

That said, each of the three sides deliver brilliant multiplayer gaming and after having thrashed about online with each for a bit, here is a rundown on what you can expect.

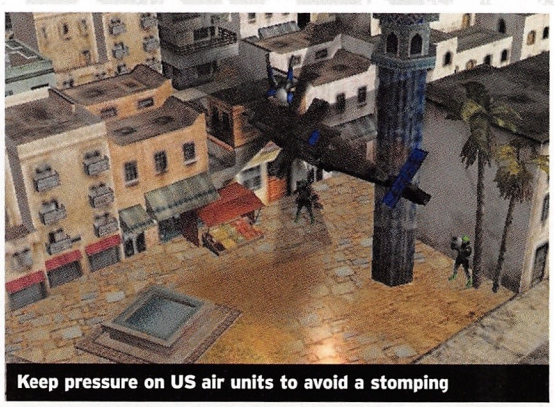
The USA

The masters of the most basic rush in the game, the USA has lethal hi-tech hardware, clever tanks with anti-missile capabilities and self-repairing drones. The US attack visciously, but don't have the numbers in hit points to use their units for massive waves. Precision is important.

The US rush is also the easiest to perfect and works reasonably well against



Continual pressure is key to victory



Keep pressure on US air units to avoid a stomping



The GLA must exploit civilian resources to the max



China's propaganda machine can tip the balance in tight skirmishes

NETWORK CODES

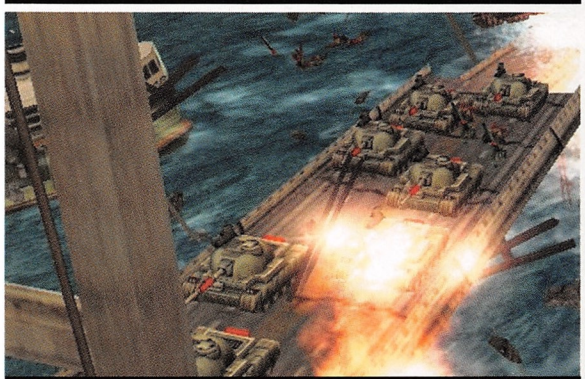
The only downside is that at the time of writing, the network code wasn't as good as it should have been. Some users, especially those playing with a home LAN and machines which are indirectly linked to the Internet via a home server, will find the process of getting a game up and running a hit and miss affair.

Hopefully, the 1.4 patch, which should be out as you are reading this, would solve the problem.

You can be forgiven for thinking that EAP should have developed a better network code from the start considering Generals' focus on online play. But, as you look back to previous iterations, nebulous net code is an entrenched pattern, which hopefully, will soon disappear. Aside from this, the multiplayer game is captivatingly addictive and full of great maps. You can tailor your strengths to suit your strategy by choosing promotion goodies.



Control of a map's central area will give you the edge


Chinese tank rushes will win the day


Sweet victory - but will it be yours or theirs?


Don't get excited - there are no naval units in multiplayer

less experienced opponents. Simply build your supply base as fast as possible, crank out ten rocket soldiers and two Humvees, then chuck a full compliment of Rocket Guys in each of the trucks and send them to the enemy supply pad. There the Rocket Guys will quickly down the enemy choppers, slowing or stopping the enemy's economy and giving you what can often be a match winning advantage.

The GLA

These guys don't have the strongest units, but they can hit fast and are resilient. Their rush is more complex than the US, but possibly harder to stop. As a strategy, first build a supply shack, a barracks and then a tunnel at your base. Also, if you have time, construct an arms dealer. Begin making troops for them too, but leave about $800 to fund the all important coup de tat. Meanwhile, the very first peasant you crank out will have just about finished his long trek to the likely location of the enemy's supplies pad. You didn't see him leave did you? Neither will your foe. Quickly build a tunnel right next to their supply station and then immediately get two Rocket Launcher guys to start attacking US Chinooks and Chinese supply trucks. Now, here is the really evil bit, use the tunnel back at your base and send the troops you have created through your tunnel network to the enemy's doorstep. Just keep 'em going and you'll reduce the enemy's base to rubble.


Don't rely on your special weapons

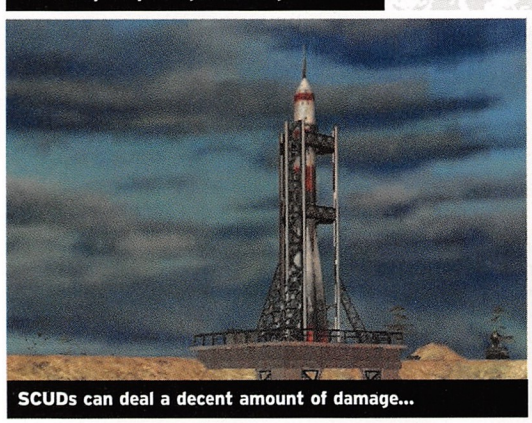
The Chinese

These guys aren't as good at rushing, but have a few great tactical gambits nonetheless. For example, you must use the Black Lotus unit to infiltrate enemy bases. She is invisible to all but enemy radar pulses (GLA), Scout Cars (China) and scout drones (US) until you have penetrated the enemy base and are ready to start capturing enemy buildings. Once you are in you can nick choice enemy buildings so fast you will probably get one or two and even sell them way before the enemy begins to take action against you thereby crippling their war effort . Nasty, eh?

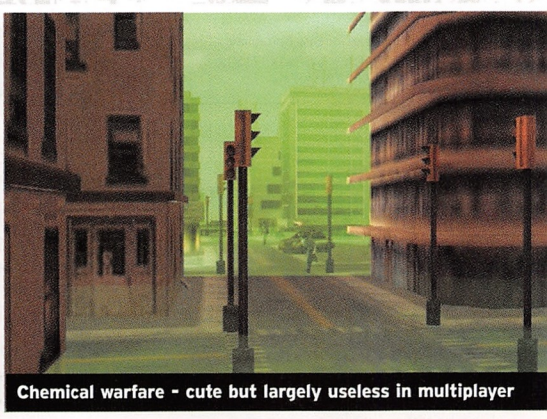
The online game is a definite multiplayer winner because it rates highly on story depth, delightful play with balanced factions and room for constant tactical reassessment.

If you are only getting into Generals in singleplayer mode, then you are depriving yourself of one of the greatest gaming experiences out there right now. Do yourself a favour and take that step online. You won't regret it.

Steve Polak


SCUDs can deal a decent amount of damage...


...but victory is won in the streets


Chemical warfare - cute but largely useless in multiplayer

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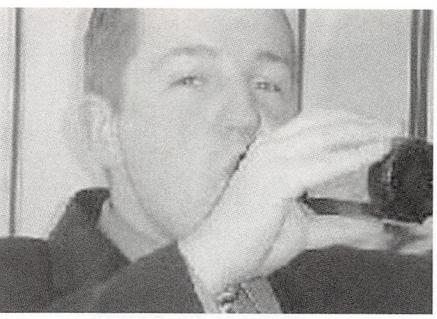
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IN REVIEW TECH

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Tweaking Done Right Down Under!
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Delegation. It is what the working world is all about. Whether it is your superior at work telling you to clear that dammed printer of the usual Monday morning paper jam, or your teacher at school giving you the exhilarating task of cleaning the whiteboard after The Wonderful Science Experiment, the same rule applies, that without proper delegation, chaos would reign. We'd all be choked by unfinished or incomplete projects. We'd never get anything significant done.

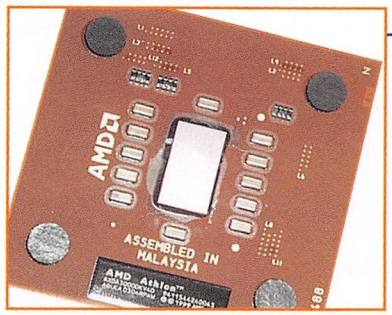
This type of thinking is exactly the reason why Anthony and the rest of the team here at PC PowerPlay decided to enlist our services for this, the newly revised Tech Section. We come from the wild and crazy country of the Internet, where updates are instantaneous and fame and fortune ebb and flow with the digital tides. Or something like that. In any case, we're here to keep you all up to date on the latest PC technologies to hit the market in this always lively and spicy IT industry of ours, whether it be about the AthlonXP 3000+ processor from AMD or a bunch of wicked case modding gear like we have served up for you in this issue by Cameron Johnson and Shawn Baker. These guys are as much hardware freaks as you, but explain everything in a way the newbie will also be able to understand without his head exploding and his brain dribbling out onto his mother's linoleum (Stuart Calvin, take note - Ed).

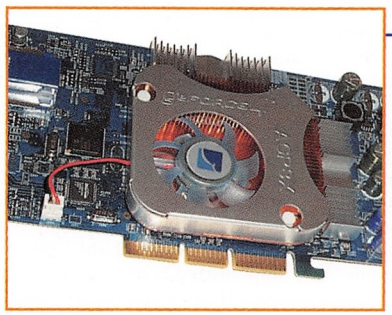
We come from TweakTown. Where is TweakTown you ask? As an already established PC hardware review website, TweakTown has been operational for three years with a large global audience, averaging 20,000 unique visitors per day. Hence, it made perfect sense for PCPP to put us in charge of the Tech Section, as Australia's biggest hardware website and Australia's biggest PC gaming and technology magazine make perfect bedfellows. Er, metaphorically, that is. With this setup put in place, our writers will be able to keep you up to speed on all of the latest gear and feed it to you in a way that you want - no boring dribble - just what the product is exactly about, what our writers thought of the product, be it good or bad, and how it performs when compared to a similar piece of kit.

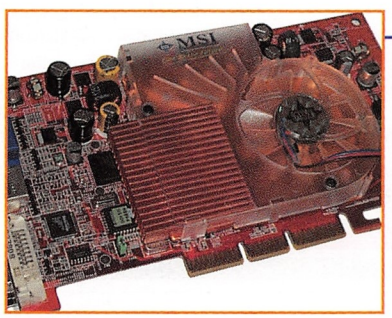
On behalf of the entire TweakTown Team, we trust that you will enjoy the newly revised Tech Section here at PCPP for many months to come. Go grab yourself a coffee, grip these pages tightly in your hot little hands and enjoy as we show you some of the hottest products to come to the market each month - comments, suggestions, flames and all that good stuff can be sent to camwilmot@tweaktown.com, or letters@pcpowerplay.com.au

And if you want another dose of all the latest hardware technology, be sure to stop by and visit us at www.tweaktown.com while you wait for your next PCPP!

Cameron Wilmot
Contributing Technical Editor
camwilmot@tweaktown.com







96 AthlonXP 3000+ CPU
98 Medusa Ti4800SE 8xtreme Ti4200
99 LCD Showdown
100 HyperX PC3500 fUnc Industries mousepad
101 P4 Heatsink Showdown
102 Sunbeam cold cathode light Sunbeam cold cathode light fan Vantec Nexus NXP201 Fan controller





PCPP TECH REVIEW SYSTEM

Here at PCPP we scour the land for the latest in PC technology, then ruthlessly test it in the decentralised hardware democracy that is the PCPP Tech Bunker. Our alliance with leading online tech community www.tweaktown.com gives us access to a pool of highly specialised writers whose experience with hardware of all kinds is vast.

A hardware review is much more objective than a game review - there are quantifiable elements to most bits of good kit, and the benchmark, as always, reigns supreme. We take into account the performance of a product first, but price is also a factor. We provide reviews of hardware you can realistically expect to afford, as well as the occasional vanity item that's just too cool not to talk about.

All our review products are compared against at least one leading brand to give an accurate and meaningful indication of performance and what you can expect should you actually buy the thing and put it in your precious machine.

PC PowerPlay GOLD AWARD

Each product is rated out of 100, where a higher score indicates a better balance of price and performance. For items where the prices is low and performance is not relevant, such as modding accessories, a more subjective analysis of the product is undertaken, where we use our experience with such items to determine whether or not they'll help make your machine look cooler or just plain tacky.

Finally, those products that are 'must have' items receive the coveted PC PowerPlay Gold award. This award is reserved for hardware that is serious kit, indeed, and will improve your PC so it's well worth the investment.

AMD

AthlonXP 3000+ CPU with Barton Core

■ **Price:** $900 ■ **Distributor:** AMD ■ **URL:** www.amd.com



AMD's Athlon has from day one been one of the biggest success stories in the history of desktop CPUs. Originally designed to take on the Intel Pentium 3 processor, continual revisions and introduction of new technology has allowed this ace for AMD to keep up with today's demanding CPU intensive applications and games.

Designed originally in a slot package that resembled the old Pentium 2 (and some early P3s like the 450MHz), the Athlon has migrated to a PGA package, and unlike Intel, it has kept this package right up to present day with the new 3000+ CPU. It is doubtful that any x86 CPU architecture has lasted as long as the AMD K7.

Dating back to 1998 with the introduction of the 0.25 micron Slot A Athlon, the K7 core has moved four times. The first move was to a 0.18 micron core in the Slot A package, this allowed AMD to move to 1GHz just weeks before the Intel Pentium 3. When the Slot package became obsolete after cache memory was moved from the processor's ungainly PCB to the actual chip, AMD released the Athlon in Socket 462, or as it is now called Socket A format and codnamed, Thunderbird.

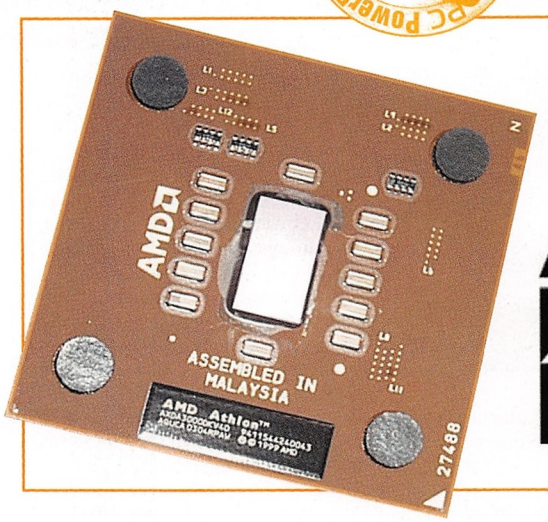
The second evolutionary change was to the Palomino core, this core kept the same package and socket, but added Intel's SSE technology for greater compatibility with applications developed with an Intel platform in mind.

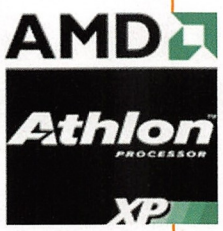
Third change was to the Thoroughbred core, which kept the same technology that the Palomino introduced but reduced the die to a 0.13 micron wafer. The fourth change is to this new Barton core.

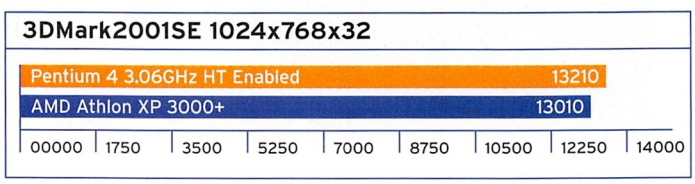
Old dog new tricks?

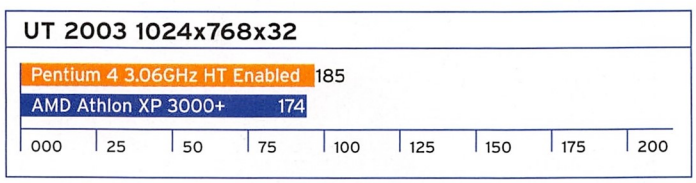
Since the beginning of the AMD Athlon roadmap, enthusiasts and insiders have known that the Athlon architecture wasn't designed for extreme external clock speeds but rather focuses on the finer points: target ALU and FPU execution engines, an enhanced frontside bus to handle the extreme amounts of data sent to and from the CPU and optimisations for the memory controllers used with the CPU.

Compared to the Intel Pentium 4 3.06GHz CPU, the AMD AthlonXP 3000+ only runs at 2166MHz or 2.16GHz. This, of course, looks bad, but the performance comparison doesn't go on clock speeds alone as AMD has shown in the past, and the new Quantispeed ratings are used by AMD to give speed comparisons against equivalent Intel processors. The 3000+ is therefore matched against a 3GHz P4 despite only running at 2.16GHz.









Pecking order

While the top dog on the Barton line is the 3000+ running at a core clock of 2166MHz, there are two other variants available, the 2500+ running at 1833MHz and 2800+ running at 2083MHz. AMD's commitment to bringing the newest technology to the slower CPU line is commendable as Intel has only one official 'next-generation' CPU and that is the P4 3.06GHz.

Though the new Barton core runs on the same socket as the original Thunderbird, the motherboard chipset required has changed. Barton core runs on a 166MHz FSB clock, or 333MHz Double Data Rate (DDR), so older chipsets such as VIA KT266A, SiS 745 and Ali MagiK 1 will most likely not run the new CPU unless you have a good overclocking board. To get the most out of this chip, you will therefore need a board based on either the SiS 746FC, nVidia nForce2 and the VIA KT333, KT400 chipset or the recently released KT400A.

Inside view

In terms of architecture, the Barton incorporates the exact same FPU and ALU engine as the Thoroughbred, as well as the same socket layout. The main difference is the cache increase and frontside bus increase. Since the Thunderbird days, the Athlon core has been equipped with 256KB of L2 cache running at full core speed. This hasn't changed in the Palomino or the Thoroughbred core. However, with the rise in cache on the Pentium 4 and the increasing speed jumps Intel has accumulated since the Athlon XP was introduced, AMD needed to add something more than just a faster core.

So it is this and the possibility of the Barton core being the last AMD K7 core for quite some time, AMD has finally upgraded the cache size to 512KB. In the past, this has proven to increase the CPU's overall ability to process data faster, since the CPU doesn't need to communicate with the memory bus as often.

The Frontside Bus or FSB has been increased from 266MHz to 333MHz; this is something the market has been crying out for from AMD since the upgrade from Palomino. An FSB of 266MHz doesn't allow enough bandwidth between the CPU and memory for a beneficial increase in performance, but with the 333MHz FSB you now get 2.7GB/s transfers, which is more than adequate considering today's memory technology is hitting 400MHz and beyond. Combined with Dual Channel memory solutions, this leaves more than enough for AMD to play with.

All in all, the XP 3000+ is a worthy next step in the continuing evolution of the K7 core and the, now, venerable Athlon architecture. For gamers and PC enthusiasts, Athlon remains the CPU of choice, offering equal or superior performance in a now traditionally cheaper package.

Cameron Johnson

THE AMD CAVEAT

At times it seems that AMD-based systems are too good to be true: cheaper, faster, with less complicated motherboard and cooling requirements, why would you buy Intel at all?

The answer, to the experienced PC user, is that you wouldn't. But if you aren't as familiar with the inside of your PC as you are with the inside of, say, your pencil case, then be warned. An AMD CPU can be a cantankerous beast if not set up properly.

This is partly due to motherboard chipsets designed by companies wholly independent from AMD, working off reference boards and often making changes ad hoc with scant regard for what this does to stability.

Also, AMD chips require considerable cooling, and the fans that attach to the tops of their bulky heat sinks can be very loud, and heat problems can also plague your system from day one.

Finally, even though things are improving, it's necessary to install more motherboard patches and drivers for AMD systems than for the Intel equivalent. If this is not done, your studly new AthlonXP system may lock up right in the middle of a particularly vital UT2K3 tournament at your local LAN. Nasty.

So while AMD is the platform of choice for the power and budget conscious, you will have to invest in a healthy amount of education about the internal workings of your PC. Which, when you think about it, is hardly a bad thing.

PCPP Score

A typically fine effort from AMD, continuing to provide an affordable and powerful alternative to Intel's overpriced Pentium 4. An increase in cache size is an overdue but welcome addition

90

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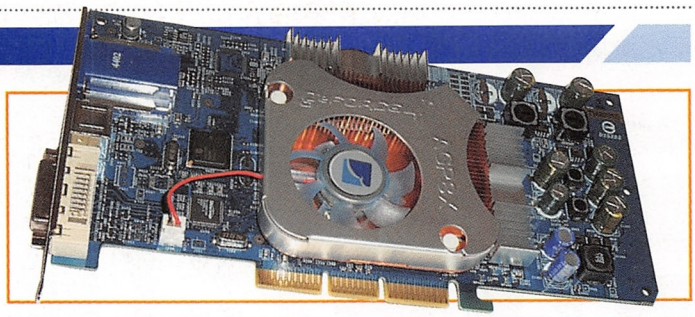
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Albatron
Medusa Ti4800SE

■ **Price:** $440 ■ **Distributor:** QTD ■ **URL:** www.qtd.com.au



There's one name on the overclocker's list of who's-who newcomers, and that name is Albatron. The company builds motherboards, videocards, even LCD monitors, all targetted at hardcore users with a penchant for tweaking. First starting with AMD Athlon motherboards based on the KT400 chipset and moving to the Pentium 4, Albatron has come in from the outset and set its roots into the overclockers market.

Albatron chose nVIDIA to power its line of videocards, mostly due to nVIDIA's continuing position as preferred GPU for users who like a good fiddle. Albatron has already produced cost-effective GeForce2 MX and GeForce4 MX videocards, and now caters for the hardcore user with the Medusa line of GeForce4 boards.

Before we look at the actual card's features lets get acquainted with the Ti4800SE. With AGP 8x mobos now widespread, nVIDIA wanted to give its GeForce4 with 8X AGP support a new name. Ti4800SE GPU is simply the original Ti4400 GPU with AGP 8x support. There is no improved memory architecture, only the AGP protocol has been changed. Its naming strategy has come under a bit of fire in that users expected a faster card than the Ti4600, but obviously didn't get it.

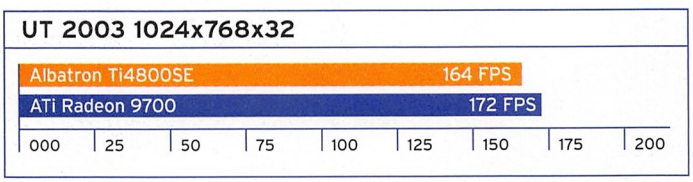
To the actual card then. The Medusa's Ti4800SE uses a Ti4600 6 layer PCB, so a motherboard with AGP port away from the memory slots is preferable. Samsung 3.3ns BGA memory on both the front and back of the card is used and is covered with ramsinks for maximum overclocking.

The core comes equipped with a copper heatsink with mini heatpipes running through the fins to dissipate heat from the core more efficiently.

Overclocking on the card was better than that of the Ti4400 or Ti4600 cards with a maximum core speed of 332Mhz and a maximum of 670Mhz on the memory, with the limited 3.3ns memory; we weren't able to take it any higher.

As the benchmarks attest though, this is a capable card, indeed, with AGP 8x support and superior memory helping it give the generally higher-powered Radeon 9700 a good run for its money. And at this price, the Medusa provides an excellent stop-gap measure before the GeForceFX becomes available (and affordable).

Cameron Johnson



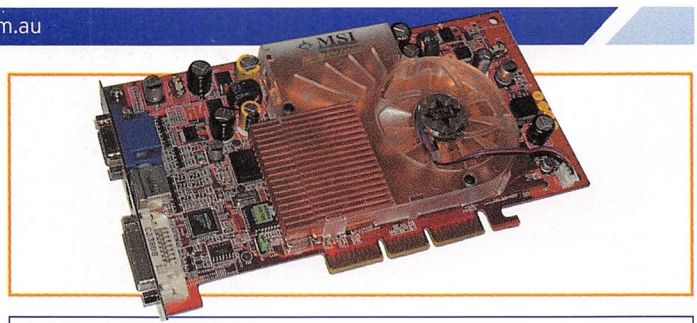
PCPP Score

Albatron has produced an impressive and feature-rich Ti4800SE solution. And at this price, the investment should not be put off in favour of the as-yet untested GeForceFX

86

MSI
8xtreme Ti4200 AGP 8x

■ **Price:** $440 ■ **Distributor:** Legend Technology ■ **URL:** www.legend.com.au



MSI has been well known in the computer production process for over 5 years, designing everything from motherboards to optical drives and network peripherals. In fact, MSI has dipped into just about all the aspects of the PC market. MSI started in the Graphics segment with the Riva TNT 2 videocards. MSI has produced a videocard for every major chipset that nVIDIA has released. MSI gained fame in the GeForce3 era with their Ti500 card for its great overclocking and TV in and out features, delivered for a relatively cheap price. MSI has since tried to maintain this image and has so far managed successfully.

MSI's new Ti4200 offering is the 8xtreme Ti4200 videocard. This card uses nVIDIA's Ti4200 video GPU with AGP8x protocol. It features all the same options that the Ti4200 GPU provided, the only major change is the AGP bus: it has been increased from 4x to 8x.

What this means is not hugely significant, as the 8x protocol does not provide any great benefits to GeForce4's chief rival, the ATi Radeon 9700, and thus translates to no real world benefits for the nVIDIA GeForce4 line either because the GPU can't handle the increased data rate.

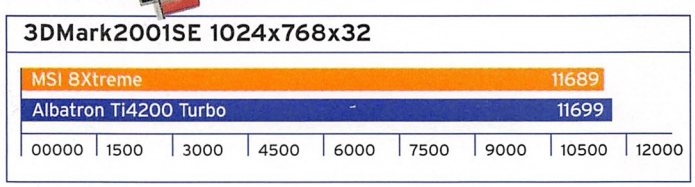
The core is cooled with a radical heatpipe-like cooler design. It does not have any vapour in the unit and the fins wave up and down over the card connecting to a large heat core directly over the GPU. A plastic shroud encases the cooler with a 40mm fan. But be warned - it's a noisy beast.

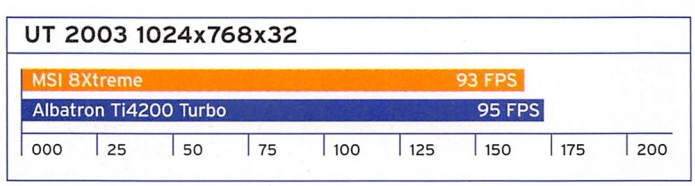
The memory on the card is Hynix 3.6ns T-SOP and totals 128MB of DDR SDRAM running at 550Mhz. The memory itself has no cooling; this greatly reduced the overall overclocking potential of the card. MSI provides Video In and Video Out functions on this card with the Phillips VIVO controller chip, while Winproduce Pro is included for MPEG2 video capture from any S-Video or Composite devices.

Overall, it's a mature and substantial package, but not a hardcore user's card by any means. It is perhaps one targeted more toward the home video producer who fancies himself an armchair overclocker.

Its benchmark results are respectable, but not spectacular, and with the likes of the Medusa (above) caning it in 3DMark and UT2K3 but costing exactly the same, you may need to think twice. Unless, of course, TV connectivity is a priority.

Cameron Johnson





PCPP Score

MSI has produced a great card for those with VIVO requirements, but for the hardcore overclocker and gamer, other graphics card players may provide superior bang for buck

79

LCD SHOWDOWN

Well sort of. **Jack Kulyk** takes a look at two snazzy and very thin new monitors

This isn't really a proper showdown. That's because the two LCDs we're looking at here don't really compare - for a start, BenQ's FP767 is a 17" monitor while AOpen's F50LS is only 15". But the difference doesn't stop there.

As our 17" CRT PowerTest has already mentioned, LCD technology is finally maturing after a longer than expected incubation period. Displays similar to those reviewed here have been available for the best part of three years, but until now you wouldn't have seriously considered playing games on them. This was because, until now, LCDs had a problem with response time - it took the display too long to turn off old pixels and switch on new ones. For desktop work, this lag was only evident in the movement of the mouse, which looked like a trendy mouse trail anyway, but in gaming resulted in smeary, difficult to follow graphics.

This is the main reason why gamers held back the LCD, well, this and the price. But with response times and cost falling, the other advantages of LCD come to the fore: no flicker, lower radiation and space, space and more space.

You really don't appreciate how your home set up is dominated by the CRT until you replace it with an LCD. Truly, this is the display technology of the future. Now here's a couple to get you started.

AOpen
F50LS 15" LCD

■ **Price:** $775 ■ **Distributor:** AOpen ■ **URL:** www.aopen.com.au

We have to admit that the main reason we picked this little display for this review was its looks. In a world of beige and bland indifference, a little bit of metallic blue and funky styling goes a long way. However, it does run the risk of clashing with the furniture but frankly, who cares? Combined with a suitably schmick case, perhaps one from AOpen itself, this LCD will go a long way toward making any set up look swankier than it really is.

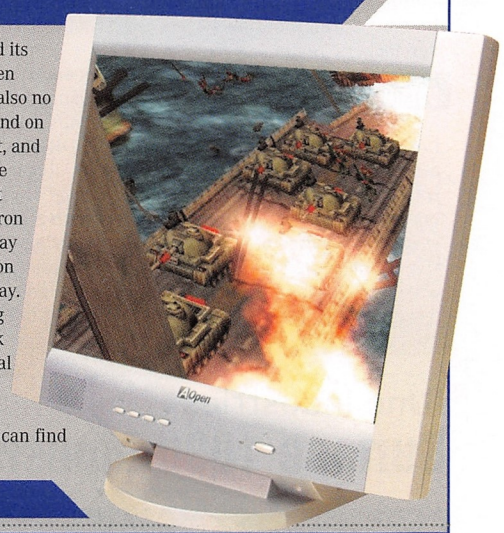
The F50LS's maximum resolution is only 1024x768, although on 15" of real estate you wouldn't want to be straining your eyes to look at anything smaller. However, in a Quake 3 session, higher resolution would not have gone astray. Due to the lower brightness of the display, pixels on an LCD do look somewhat grainer than their CRT equivalent.

Speaking of brightness, the F50LS's is not particularly high, but colours are well defined and unlike many older LCDs, this one can do a decent deep black, which is most important for sneak-em-ups and Freelancer (if anyone out there actually plays it!).

Response time is the key element in judging an LCD fit for gaming, and the F50LS's listed response time of a whopping 40ms is not immediately encouraging. However, AOpen has elected to use a very high quality screen panel, so the listed response time doesn't have that significant an impact during actual practice. In fact, in a Quake 3 test, there were certain maps in which the F50LS actually looked better than the BenQ FP767!

Beyond the screen, there's not much more to this display. Output is limited to SVGA - there's no support for the DVI digital interface found on most recent videocards. Indeed, DVI was invented for LCD screens and its always a shame when a screen lacks such an input. There's also no USB hub like as you would find on a CRT at a similar price point, and on screen display controls are fairly basic, although without having to correct for an electron gun's distance from the display surface, things like pincushion controls are redundant anyway.

The F50LS is a surprising display in that its specs look dull on reading, but its actual performance is quite satisfactory. But the price is high - add five marks if you can find one for $100 less.



PCPP Score

Solid display that outdoes its own spec. A little pricey at the RRP, but a bargain would be worth picking up

80

BenQ
FP767 17" LCD

■ **Price:** $999 ■ **Distributor:** BenQ ■ **URL:** www.benq.com.au

Now this is a nice piece of kit. BenQ has gone all out in an attempt to bring the LCD home, as it were, and into the nasty fetid den of the gamer. To this end, the FP767 and others of its family sport an impressive 16ms response time (compare that to the AOpen's rather more standard 40ms) so smearing and blurring is a thing of the past.

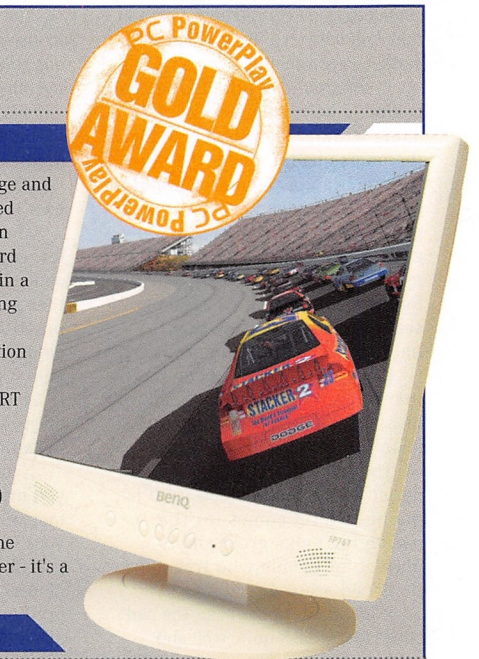
A 16ms response time equates to a frame rate of about 64fps - significantly lower than the capabilities of all but the crustiest of videocards, but as far as the actual human eye is concerned, it's smooth sailing all the way. Besides, humans can't detect frame rates higher than about 70fps, and at 64fps, the FP767 performs like a CRT - it's as simple as that.

Maximum supported resolution is 1280x1024, which is pretty standard even for a 17" CRT and is the resolution that most extreme users like to run. This is also the FP767's 'native' resolution, where one pixel on the desktop equates to one actual transistor on the display matrix. All other resolutions are interpolated, so some fonts can look a little odd. However, this problem is much less pronounced on these next-gen LCDs thant it was on last year's models.

Like the AOpen display and most LCDs at the sub-$1000 price point, the FP767 has no DVI input for a direct digital signal, so everything from the PC has to be converted by the videocard's Digital-Analog converter and then converted back again by the display's Analog-Digital converter. Yet another example of stupidity through extreme cleverness.

Unlike the AOpen display, the FP767's connector cord can be completely detached from the screen, allowing for much easier storage and transport. Permanently attached connectors are my pet peeve on displays of all types - it's so hard photographing eight monitors in a row when the cords keep getting tangled up.

The FP767 is a worthy addition to any gamer's den, and a real alternative to a high-end 17" CRT - like the one Sony no longer makes, damn it. At a shade under $1000 (you should be able to find one closer to $900) it's a little pricey but still just inside the 17" CRT ballpark. The response time is the real winner - it's a worthy gaming display.



PCPP Score

Smear-free, this is one fast LCD that works perfectly for gaming. Be sure to check out its big brother on the subscriptions page

91

Kingston
HyperX PC3500 DDR SDRAM



■ **Price:** $420 ■ **Distributor:** Kingston ■ **URL:** www.kingston.com

Who in the past hasn't had Kingston memory inside their precious beast? While we may not have actually purchased it, we may have used it. Kingston has been the choice of many OEMs and system integrators for some years but until now it hasn't had much to do with the overclocking market. The company has kept towards their more "general user" image, but this seems to be changing with this latest introduction: HyperX, a snazzy-looking metallic blue module that promises performance and overclocking potential to back up its pretty face. Thank you Kingston!

On the physical side of things, Kingston has moved away from the plain-Jane look of their ValueRAM and moved well into the overclockers' realm.

OVERCLOCKING

Designed with handpicked memory modules for frightening speed and with overclocking results of a maximum speed of 510Mhz at CL.5 with a ram voltage of 2.8v, the HyperX gives OCZ and Corsair alike a great run for their money at a similar cost.

This HyperX memory is the first from Kingston to include heatspreaders, on both front and rear sides of the module.

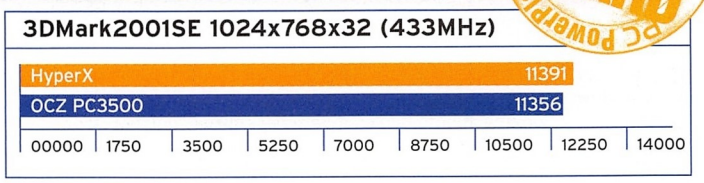
The spreader itself is comprised of aluminium composite and locks onto the module with two clips, similar to OCZ's copper sinks. Thermal tape is also used to aid in the transfer of heat between the ram chips and the spreader.

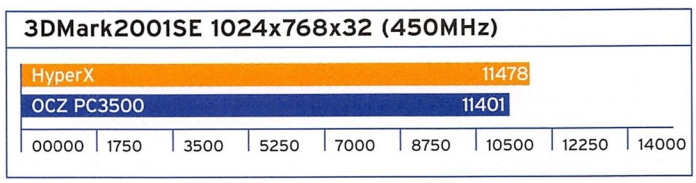
Kingston debuts the HyperX memory at PC3500 which gives us a speed rating of 433Mhz. Kingston uses their own V53936 5ns chips on a 6 layer PCB in 512MB sizes with 8 chips per side of the PCB, totaling 16 chips. This means that you can only install two of these modules into Intel 845 based motherboards for a total of 1GB of RAM only.

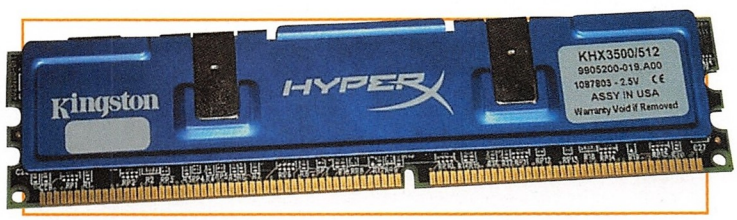
Kingston also specifies the memory to run 433Mhz at CL2 using only 2.5 volts, this is 0.2 volts under recommendation for DDR-400 memory modules.

Regardless of these niggles, it is good to see a memory manufacturer with a substantial track record moving to cater toward overclockers and tweakers, and producing such an attractive piece of kit to boot!

Cameron Johnson







PCPP Score

Kingston has put out a great first overclocking module to complement the ultimate overclocking rig. Put simply, Kingston has us hyped for HyperX

91

fUnc Industries
Surface 1030 Mousepad

■ **Price:** $60 ■ **Distributor:** Webber 4 Technologies ■ **URL:** www.webber4.com.au

No this is not a joke. Ask anyone who frequents LANs or attempts to play Counter-Strike or Q3A with some degree of competitiveness, and they will tell you a decent mousing surface is paramount.

It seems that as the ball mouse is slowly being phased out and along with it the widespread use of the mouse pad. Indeed, the introduction of the optical mouse got rid of the need to have a mouse pad at all - the average desktop gave the laser purchase enough for most needs. But hardcore and tournament gamers were soon searching for a surface that improved response and accuracy.

fUnc Industries is a company that has only recently popped up in Australia, but the Surface 1030 is an impressive first outing.

The immediate thing you notice about the Surface 1030 is the huge tin it comes in. The packaging looks great and is perfect for people who transport their pad around for LANs.

With an all rubber base, the pad sticks to the desk quite well and works better than the conventional feet on the bottom of most other mouse pads. Also included is a cord-clip which gives the mouse more slack, so that you don't find yourself pulling at your mouse in the middle of a heated gaming session.

The most unique feature of the mouse pad is its double sided surface; one side is completely smooth while the other is slightly textured. Both surfaces feel great and the best way to look at it is when one side does eventually wear out you can simply turn it over and have a mouse pad that feels brand spanking new.

The mouse pad is available in a few color combinations and there shouldn't be a problem finding one that suits you, but on a more practical note, on loading up a game you find yourself having to adjust the sensitivity due to the the mouse gliding across one side of the screen to the other almost too smoothly.

Normally with an optical mouse you don't even notice the lack of a mouse pad... but wait until you get your hands on an excellent quality pad like this. Being one of the best mouse pads we have used, the product is only let down by a high price tag, however, if you are someone who takes their gaming seriously, you will be able to justify the cost.

Shawn Baker



PCPP Score

One of those bits of tech you don't even realise you need until you use it once and discover you just can't live without it. A triumph of simplicity and function

89

SHOWDOWN! P4 HEATSINKS

Shawn Baker takes four coolers head to head to keep his beast frosty

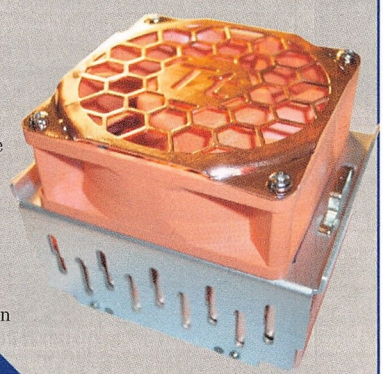
One of the more unfortunate realities facing us PC users is that our wonderful machines are not particularly well designed from a thermal perspective. That is to say, they generate a lot of heat. So much heat in fact, that if you were to prise off the fan and heatsink from your $1000 3GHz Pentium 4 and then turn it on, your investment would last all of about four minutes before burning out and turning a triumph of microengineering into little more than a lump of glass.

While your factory-issue heatsink and fan combo will serve you well enough, if you want to tinker with overclocking in any capacity whatsoever, you'll need a new cooling solution. You could go all-out and tinker with water cooling or invest in more exotic cryogenic sytems, but before you go mad, take a look at these four heatsinks. They're designed specifically for P4 systems and should allow you a crucial handful of degrees extra overhead when further tinkering with your expensive toy.

Thermaltake
P4 Spark 7

■ **Price:** $55 ■ **Distributor:** PC Case Gear ■ **URL:** pccasegear.com.au

Thermaltake's new Spark 7 follows the traditional design of a cooler and there isn't anything unusual about it. It's the lightest cooler out of the four tested which isn't too much of an issue when it comes to a P4, since the design of the PCB puts pressure on the heat spreader and not the actual core. The ability to adjust the fan speed manually is handy as it limits the need for any external panel or set of controls. The inclusion of a 70mm fan does limit your ability to upgrade as most fans available are 80mm. The only real problem with this unit is that its contact isn't as perfectly flat as the other three; fortunately a bit of heatsink sanding (called lapping) can fix this. In the end, the Spark 7 is a classic design that still works well. If you're a fan of Thermaltake products (Geddit? - Ed), this unit is definitely worth taking into consideration.



PCPP Score

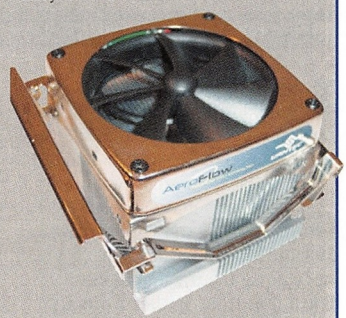
Excellent value for anyone who wants to upgrade without too much complication

87

Vantec
VP4-C7040

■ **Price:** $55 ■ **Distributor:** PC Case Gear ■ **URL:** pccasegear.com.au

The VP4-C7040 has redefined the traditional heatsink fan design by adding a few extras that should help give you a quieter, yet still powerful cooler. The fan used is operated by something Vantec calls a Tip Magnetic Driving Fan. This should result in a better lifespan as there is only one mechanism driving the fan. The new design of the fins also results in quieter fan which is excellent as a lot of people find the main advantage of a P4 is its relative silence compared to an AMD system. However, this unit is also the only heatsink in this roundup to have a small copper insert rather than a full copper base - and its higher temperature results reflect this.
Vantec has produced quite a good heatsink, unfortunately it is held back by a fan that pushes only a smallish volume of air, so combined with the base design its cooling results were higher then we liked.
At the same price, the Spark 7 is not only adjustable but it also keeps your baby cooler.



PCPP Score

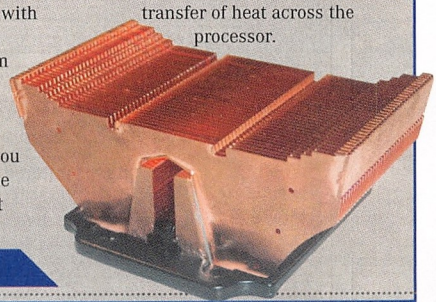
Interesting design and refreshingly quiet, but in terms of functionality, it doesn't perform too well for the price

65

Thermalright
SLK-900U

■ **Price:** $110 ■ **Distributor:** PC Case Gear ■ **URL:** pccasegear.com.au

Thermalright is one of the larger companies though offer coolers to an enthusiast market. The SKL-900U is its top cooler for the P4 but, unfortunately, this does come at a cost - $110 is a stiff price tag for a product even of this class. The most noticeable feature is the solid construction with an all copper heatsink. While it doesn't come with a fan, the good news is that it is capable of holding 60mm, 80mm or 92mm fans with retention clips available in the package. These clips are very easy to use and with three different sizes, you won't have a problem finding the right fan for you. Even though it weighs 13 grams less than the Swiftech offering, this is still a very big boy. Everything in this product oozes quality and the results mirror this. In the end, the amount of money you spend will determine how much overclocking consumes your life. The contact surface on this unit is definitely the best out of the four coolers, resulting in a more even transfer of heat across the processor.



PCPP Score

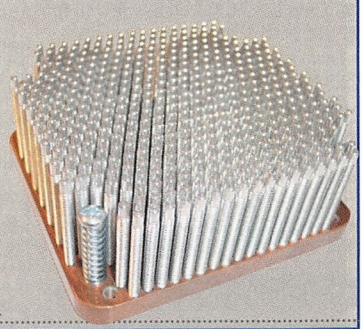
You pay big but you get big - big results that is. The shine is only taken off by the lack of a fan in this pricey package

92

Swiftech
MCX4000

■ **Price:** $98.50 ■ **Distributor:** PC Case Gear ■ **URL:** pccasegear.com.a

Swiftech, like Thermalright, creates air coolers with the overclocker in mind. The Swiftech is the heaviest out of the lot weighing in at 600 grams and it doesn't come with a fan. This unit can only be mounted by bolts which necessitate complete removal of the motherboard from your case, making the installation process little short of arduous. However, it is an excellent unit which is unfortunately let down by a high price tag aimed at the enthusiast computer user. The thermal compound provided is none less than Artic Silver which is a nice touch as you would normally receive some cheap compound like we did with the other units. The MCK4000 actually slightly outperforms the SLK under load, although only by one degree, which is inside our margin of error in any case. But the complicated installation process makes it, ultimately, a less sensible choice, although you will be hard pressed to draw a definite distinction.



PCPP Score

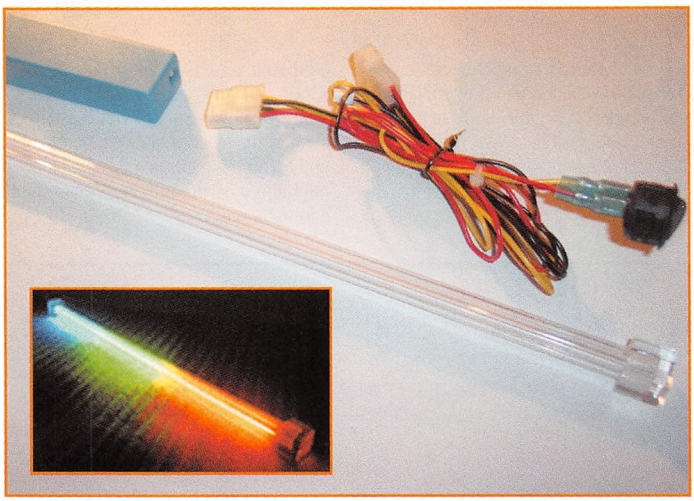
An excellent cooler, our only real criticism is the curious installation method that forces you to dismantle your whole PC

89

Sunbeam
Multi-coloured Cold Cathode Fluorescent Light

■ **Price:** $35 ■ **Distributor:** Sunbeam ■ **URL:** www.sunbeamtech.com

Cold Cathodes are one product that any self-respecting case modder shouldn't be without. On their arrival they were considered one of the best lighting but were hindered with a $50 price tag. As case modding grew, prices dropped and now cold cathodes can be found as cheap as $30 each. The Sunbeam kit follows the traditional design of a cold cathode; it includes an inverter, on/off switch, required cables and the cold cathode tube itself. The Sunbeam kit has been one of the brightest kits we have had the pleasure of using. The inverter is a very sleek blue design and also included is velcro to hold the inverter and cold cathode in position inside your case. Another advantage to this kit is the inclusion of the on-off switch for those users who leave their computer on all the time and need to have the ability to turn the lights off when packing up for the night. Overall, this kit is well made and extra bright, but you may find you have to order it in from overseas.



PCPP Score

Will pretty-up the dullest of cases, improve your popularity at the next LAN and be irresistible to the opposite sex. We swear.

82

Sunbeam
Cold Cathode Fluorescent Light Fan

■ **Price:** $29 ■ **Distributor:** Sunbeam ■ **URL:** www.sunbeamtech.com

The fan was one of the first items brought into case modding as hardcore users quickly realised they needed to push more air in and out of their cases. As time went on it became more a matter of looks than being practical, and with that we saw the release of LED Fans. A year or so down the track, and these latest fans from Sunbeam simply expand on the LED idea by using a round Cold Cathode to help emit more light. Rated to push 32CFM at 27dba the fan is quite standard, it pushes enough air at a good volume and doesn't create too much noise; there is nothing worse than a kit that adds large amounts of noise to your computer. The worst feature on the fan is the decision to use sleeve bearings instead of ball bearings. Sleeve bearings don't last as long as ball bearings making the overall life span shorter. But priced at a reasonable $29, they are definitely a product worth looking at. Overall, this is an excellent product from a company I think we will be seeing more of in Australia. If you're in the market for some new fans that add a bit of jazz to your PC, then look no further.



PCPP Score

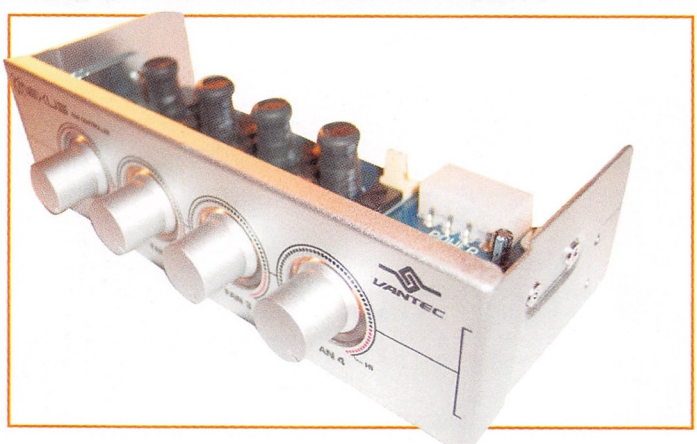
Original and fun idea that has pleasing visual results. A shame the actual fan doesn't perform a bit better

82

Vantec USA
Nexus NXP-201 Fan Controller

■ **Price:** $49.50 ■ **Distributor:** PC Case Gear ■ **URL:** www.pccasegear.com

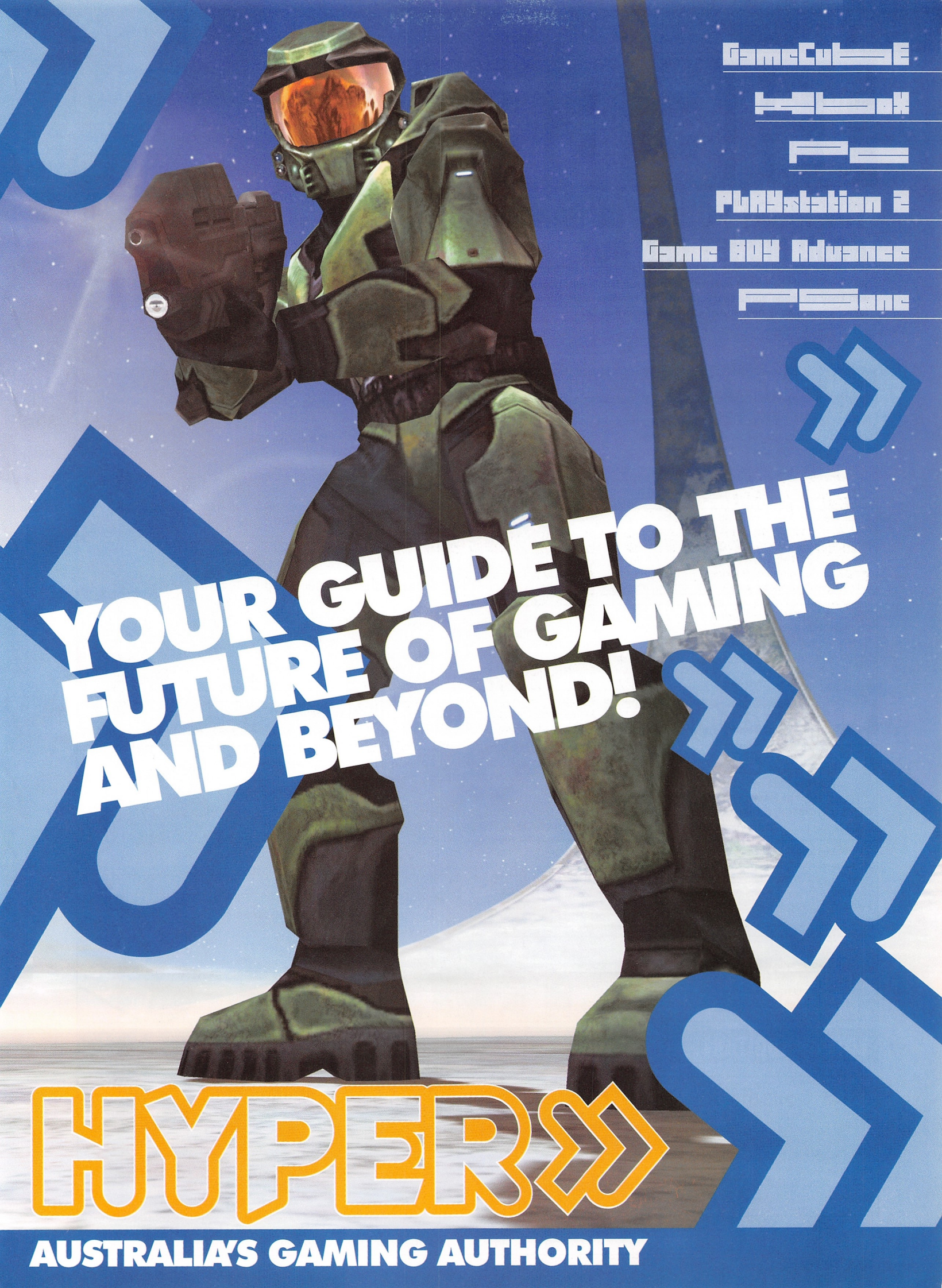
If you have a loud fan, you will find the Nexus NXP-201 perfect for peace and quiet. Not too long ago we had the chance to look at five different fan controllers on TweakTown, and the Nexus fan came out on top. With its great build quality, good price and availability it really is an excellent controller. Each channel is rated to 18 watts so there shouldn't be a problem with any fans not operating properly. That said, the only fan that was unable to come to a stop was the 80CFM Vantec Tornado fan, which is a real beast at the best of times. As the controller doesn't go down to 0 voltage, fans that start spinning at a lower voltage will not turn off. An excellent fan controller if you are looking to gain intimate control of your case's airflow.



PCPP Score

It's got knobs and pretty lights, what more could you want? It might not be able to take full control of your bigger fans though

81


GameCube
Xbox
Pc
PlayStation 2
Game Boy Advance
PSone
YOUR GUIDE TO THE FUTURE OF GAMING AND BEYOND!
HYPER
AUSTRALIA'S GAMING AUTHORITY

THE BEAST

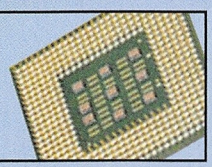


THE MOST POWERFUL GAMING PC GOOD MONEY CAN BUY

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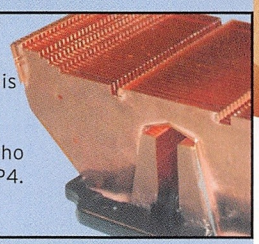
Gigabyte GA-8INXP (E7205 Granite Bay)
With Dual Channel memory support through Intel's new Granite Bay chipset, the GA-8INXP mobo is one of the hottest motherboards for the Pentium 4 to reach our shores.
$470 www.scorptec.com.au



2GB Corsair XMS3200 TwinX
Corsair TwinX sticks of fast PC3200 DDR SD-RAM work best in your Dual Channel GA-8INXP giving trouble-free operation, and leaving you with memory to burn.
$1600 www.altech.com.au



Thermalright SLK-900U HSF
Awarded the PCPP Gold Award in this issue, the goliath all-copper Thermalright SLK-900U is the best heatsink money can buy giving mucho headroom to clock your shiny new P4.
$110 www.pccasegear.com

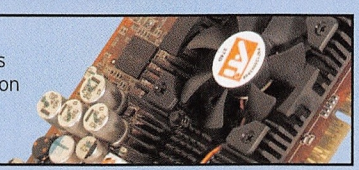


Antec TruePower 550W PSU
Sticking with tradition, the Antec True Power PSU is the undisputed king when it comes to powering your PC, and with 550 watts to boot, it'll do it no sweat.
$199 www.pccasegear.com



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Sony MDR-DS5100 Wireless Dolby Headphones
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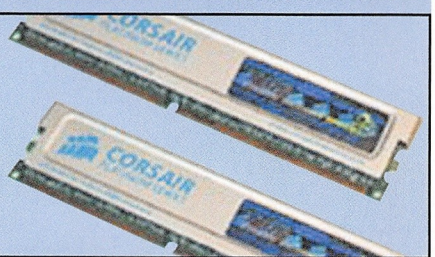


LATEST ADDITION

2GB Corsair XMS3200 TwinX

Ever since we went to Pentium 4 all those months ago, the Beast has used RDRAM for memory, partly because it gave superior performance to DDR and partly because we lived in hope that prices would one day return to Earth. But with the likes of Corsair providing 1GB PC3200 DDR RAM in funky, RD-RAM-esque modules, we thought it was time to return to dual-channel DDR. And with 2GB far cheaper than the RDRAM equivalent - well the choice is a no-brainer.

$1600 www.altech.com.au



STORAGE AND OPTICAL

Pioneer DVR-A05 Pro
The DVR-A05 Pro is Pioneer's latest all in one optical DVD-R, DVD-RW, CD-R, CD-RW recorder. Why stop at 700MB when you can be copying 9.4GB on Double Sided DVD-R Media?
$1649 www.ht.com.au



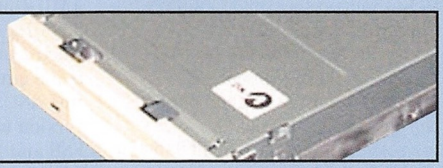
ASUS CRW-5224
Offering 52x read, 52x write and 24x re-write this is currently the fastest CDRW drive around.
$180 www.techbuy.com.au



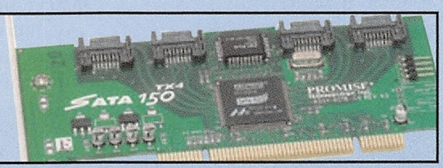
Seagate Barracuda ST3120023AS SATA 120GB x2
Thin data cables making your case less cluttered, performance increases over regular ATA100/133, onboard RAID through Gigabyte's GA-8INXP mobo, all combine to make Serial ATA all the rage.
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Panasonic 3.5" Floppy
Soon optical drives will totally replace the need for the aging 3.5" floppy disk drive, until that time - we best keep one handy
$25 www.gamedude.com.au



4-Port Serial ATA/150 RAID controller
Sure Ultra wide SCSI is faster, but without a PCI-Express motherboard is greatly underutilised. Can be used as a highly effectively RAID solution.
$TBA www.adaptec.com (02) 9416 0687

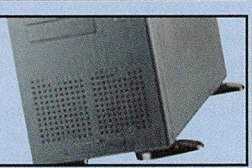


PHYSICALITY AND INPUT

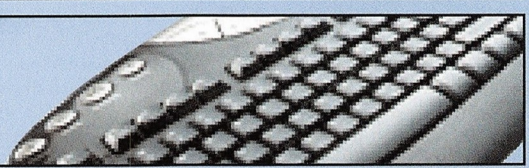
Samsung SyncMaster 240T 24" TFT
Impress your friends with the most beautiful (and expensive) LCD monitor available. This wide screen gem has it all, and then some. Absolute gaming bliss.
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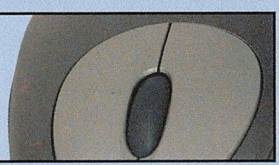
Lian Li Black PC71 case
It's black, oozing with complete style and class and manufactured by Lian Li - what more could you ask for?
$460 www.pccasegear.com



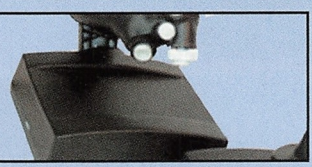
Logitech Cordless Freedom Optical
No cables means no tangles and looking like it belongs in the lair of a Bond villain - what more could you want for the Beast?
$250 www.logitech.com (02) 9972 3711



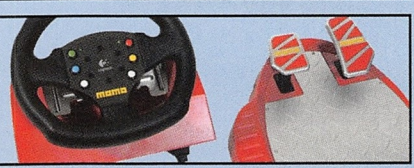
Logitech Cordless Mouse MX700
At 125Hz it's 25 cycles per second faster than a standard corded mouse and the receiver station also doubles as a recharger. An accurate pointing device it's perfect for all forms of gaming. This is certainly the best mouse ever made!
$189 www.harristechnology.com.au 1 300 139 999



Thrustmaster H.O.T.A.S. Cougar Flight
Modeled on the f-16 flight stick and throttle, the HOTAS Cougar will make you a master of flight sims.
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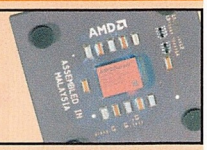
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512MB of Kingmax RAM
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Supporting Dual DDR400, AGP 8X, USB2.0, ATA133 and SoundStorm technology
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80GB Seagate Barracuda HDD
7200 RPM with plenty of room for all those games you install
$190

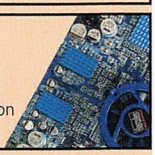
Sony 16X DVD
Not much use having that DVD full of goodness on the cover when you can't look at it
$75

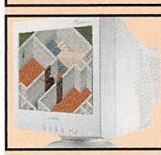




Gigabyte R9000-Pro 2
With 128MB onboard, twin view, DVI support and more this card is perfect for the beastie
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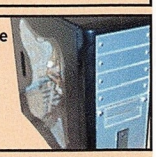
Hercules Muse XL
Fully EAX 1 and 2 compatible this is the most affordable surround sound solution
$35

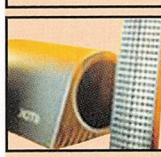




Hyundai F770D 17" CRT
It's big and flat, for gaming in crisp colours
$260

Black Millennium case
Mid Size case with a clear side Perspex window and 350watt PSU
$110





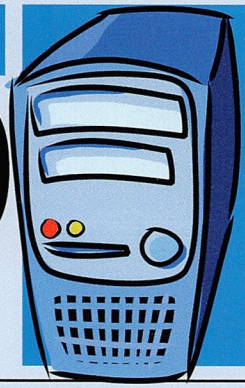
TDK Tremor TS-60
Excellent bass and amazing satellite response
$129

total beastie value: $1733



STUART CALVIN WAXES TECHNICAL

SETUP



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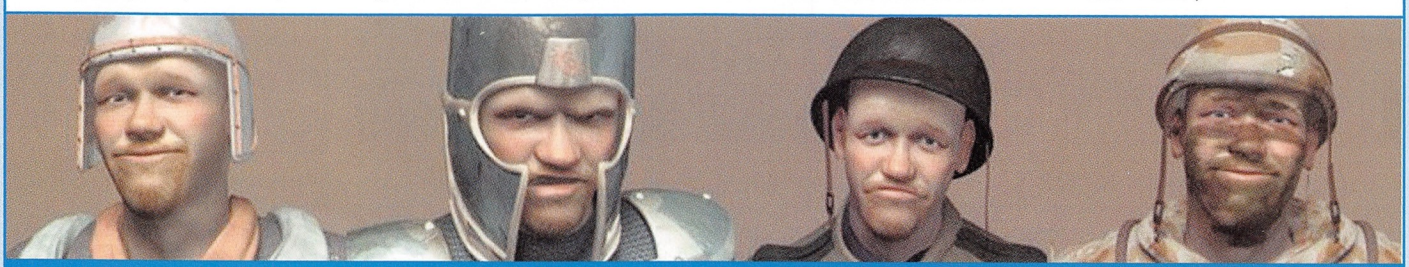
LETTER OF THE MONTH: WHERE HAS ALL MY GRUNT GONE?

As I have gradually installed and uninstalled games over time, I have noticed something rather disturbing: games that previously ran fine are becoming slower and slower to the point where even Civ3 is laggy. I've defragmented the disk, but this has had little effect and I don't feel particularly confident to trawl through the registry. I have a Duron 800MHz with 256MB RAM and an MX100/200 (64MB) video adaptor.

I'm sorry if this is a nOOb question. Also, will my ASUS A7V KT133 support the Athlon 2100XP+ in your Beastie section? My manual it says the motherboard handles all Duron/Athlon processors, but this motherboard is one and a half years old.

Geoff Darby

Bummer dude. Games are lagging because PCs need more grunt to run them but you are not quite SOL. On release, the A7V KT133 was a Socket A for AMD Thunderbird/Duron 550MHz ~ 1GHz CPUs. It only electrocutes PC133 SDRAM and is flat out at ATA66 (eek!). This was ASUS's first Socket A version to incorporate a 200MHz FSB and 1.5GB PC133/PC100/VCM133 SDRAM capability in an x86 platform. If you're lucky, later revisions of this board included ATA100 support and AGP1.0 compliance at 4x *note: this does not mean AGP2.0 4x*. However, the good news is that BIOS 1009 Final released 30 April 2002 supports 48-bit disks (big buggers), added support for 'new Thoroughbreds' and supports up to XP 2200+ (the PCB version must be 1.05 or above). BIOS support for the AMD Athlon XP+ CPU was added in 1007 Final :)



These guys are grunts, see. And Geoff is losing his grunt. So we've given him some new grunts, geddit? Geddit? (Stu, it died - Ed)

RUNNING LOW

Q I have a friend who has an AMD 1800+, 512MB SDRAM, GeForce4 Ti4200 and the PC is running slow on very high settings for games, and even with no FSAA he has slow frame rates on Battlefield 1942 and Mafia. I told him the reason why it's so slow is that he only has SDRAM, which has a FSB of 133MHz, and DDR would be a faster option because it can have an FSB of 533. I also noticed that he had only AGP 2x. Please help him so he doesn't have to buy a new CPU. I know BF1942 requires a big rig but another mate has a 1.40GHz Athlon, 256MB SDRAM and a GeForce2 Ti and it ran perfectly on high settings, which was strange, but then he has AGP 4x. We have gone through all the settings, updated BIOS, video and sound. We have installed DirectX9 on WinXP Pro.

JCDenton001

A PC133 will bottleneck this PC but perhaps not to the extent described. Have you installed the latest nVIDIA Detonator drivers? Make sure that DMA is enabled – see the MS Knowledge Base Article 258757. Without telling me the motherboard brand and model, I can only say that there should be an AGP 2x/4x setting in the BIOS – it's there somewhere. If the motherboard chipset is a VIA then poke around the Hyperion 4-in-1 driver page – the latest is v-4.45, released on 10 December 2002. If the motherboard is a little old it may not be AGP2.0 compliant but it's still obviously able to run the Ti at 1.5V in one way or another (or the Ti is running in backwards-compatible AGP1.0 mode). One or more of these issues I've highlighted will be the problem; I've also got a funny feeling about DirectX9 which has caused a few problems. Have you run dxdiag.exe? Are all drivers OK there?



Well this is flying low, which is LIKE running low. Surely?

NO RECOGNITION

Q Most times, startup does not recognise my external harddrive, so I have to unplug and then reconnect the hard-drive's data cable. I have XP Home and the drive is connected via FireWire. Often, the hard-drive is shown in Device Manager with an exclamation point in a yellow circle. Sometimes, the drive letter is shown in My Computer, but when I try to open the drive, I get an error message: "F:\ is not accessible. The network resource or device you are trying to access is no longer available." Sometimes, the drive is not recognised at all.

Milod



I'm sorry, I don't recognise you

A Microsoft is researching this problem and will post some information in the Knowledge Base when they solve it. To work around the problem, unplug the drive after you shutdown and reconnect the drive after startup. The problem is widespread enough for Microsoft to get cracking. Has anyone fixed this with SP1? It doesn't affect me without SP1 but I have an Intel chipset on my FW box.

DETECT PRINTER

Q I have a Canon S200SP printer (with USB connection). After updating my operating system from Win98 to Win2K my PC can't detect my printer when I try to install it. I've looked through all the manuals but have no idea what to do.

SilentSc(+)pe

A **Good news – your printer is compatible with Win2K but make sure that the USB ports are functional. The printer is newer than the operating system you have 'upgraded' to and will thus not be immediately recognised. You need the S200SP driver v-1.52 for W2K (and WinXP) if this is not what's on your installation CD. The file is s200sxp152.exe, 2.4MB is size, posted on 13 June 2002 at http://canon.com.au Have you considered SP3... it's done me no harm.**

SLOW DOWNLOAD

I recently connected to Optus dial-up, but when I went to http://neogohan.net to download a 4.6MB music video, it downloaded at about 4.4kbps which was weird seeing that I was using Download Accelerator Plus (from the PCPP DVD). I thought it was just because it was my first download and things would speed up later. It didn't. The next music vid I downloaded went at about 3kbps. Now anything I download never goes faster than 2.7kbps! This is insane. Kazza Lite is so bad that I get happy if speed goes above 1kbps! I took out the extension line from my modem and moved my PC to the lounge. I dialled up from the 'original' line and only experienced a slight increase. What the hell is wrong? My modem is a Conexant HCF V90 56k Data Fax PCI Modem. PS: what ever happened to V92?

5121 DAMN!



You think YOUR printer sucks?

Um, well, nothing is wrong, I have the same modem. My BigPond dial-up connects at 48000 bits per second (60K is the theoretical max but real-world is about 52K at best). On a good day, if no-one else is leeching off the same site, I can download at 5KBs or thereabouts. Most times I'm in the 4-5KBs range, but I see 3-point-something KBs when I download from popular sites in the US and Europe. Whenever I try to download a Nero or DiscJuggler update, I'm staring at less than 2.0KBs... welcome to the world of dial-up. You also need different drivers for different operating systems. V92 focuses not on speed, but on ease of use and better functionality. You can read about V92 at http://v92.com/about/. However, when you read this, I'll be on http://bigpond.net.au (broadband), hehehe. For the Calvin family, five PCs, two phone lines, unlimited hours/400MB download (plus damnit-excess-children invoked MBs) and five or six dial-ups per day is now more expensive than broadband. If broadband is available in your area then do the math for cable first then ADSL.

UNINSTALLING

As I told Ben last issue, when you replace hardware in WinXP (or Win2K) it must first be uninstalled rather then just ripped out with fingers crossed. If you've ever done this then to eliminate some errors you must delete any old NICs (and other adaptors) from the WinXP Device Manager. Open a command-prompt and enter the following commands:

```
set devmgr_show_
nonpresent_devices=1
start devmgmt.msc
```

The first command allows Device Manager to show phantom devices. The second command launches Device Manager. From the Device Manager's menu, select View, Show hidden devices. Expand the Network Adaptor tree, and delete the old adaptor.



DEATH! DEATH to the machine!

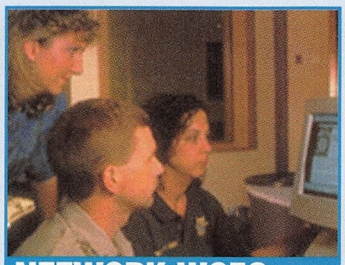
MONITOR REVIEWS

I'm looking to create a Beast with a P4-2.8GHz and ATi Radeon 9700. I'm unsure what sort of monitor I need to do justice to my Death Box. I've been looking around the Net for reviews but am struggling, as it seems most reviews are about Video Cards, Mobo and CPUs. I was thinking of a 19" like the Sony G420. But it's more expensive than the other 19" monitors and I have no idea if it's any better. Can you recommend something or point me in the direction of a site that might be able to help me?

Barry \m/

I like http://reviews.cnet.com/ and www.techwatch.com.au but there are others. A quick search at http://razorprices.com (an Australian site) showed the cheapest prices around – check shipping costs and insurance though! Personally, I am very impressed by the Hitachi CM721F Flat CRT monitor (0.20mm) and found one at www.secretnet.com.au for $522.50 - they were over $700 just six months ago. At the cheapest, a comparable Sony CPDG420 Flat CRT is about $820 and a Viewsonic also up around $800. You need to test drive a monitor so sit yourself down at the shop and do some stuff. Some specs to look out for are: less than a 0.26mm horizontal dot pitch or 0.29mm diagonal dot pitch (dot pitch is the distance between phosphor dots of the same colour type). If you do a lot of gaming then a larger dot pitch is OK; conversely, if you surf a lot, read a lot, study a lot then choose a smaller dot pitch. Another spec is resolution/refresh rates and they should be 1600x1200/better than 75Hz, 1280x1024/better than 80Hz, 1024x768/better than 100Hz. The picture should be sharp, clear and pleasing to look at. Very cheap large monitors have a curved screen and often they are not crisp to the point of blur across the viewable area. More expensive monitors have flatter or flat screens and I can tell you from experience that curved screens suck.





NETWORK WOES

Re Network Woes PCPP#83 Several readers (Robert Halstead, Phillip Green and T. Randle) wrote in to help out Derek from February (PCPP#83). I have forwarded all your mail onto him. Thank you very much everyone!

The problem appears to be in the XP Registry and the answer can be found at tweakxp.com. This is a fix for a "data invalid" problem that nags you while you are installing and swapping out cards with WinXP. This error could be due to a protection problem in the Windows registry and can occur with a variety of drivers such as sound cards and SCSI drivers. To fix this problem, go to Start, Run... and type "regedit" without the quotes to run the Registry Editor. Navigate to HKEY_LOCAL_MACHINE/SYSTEM/CurrentControlSet/ENUM/PCI/ and you will see a number of keys of the form "VEN_xxxx", where xxxx are strings like "1102andDEV_0004andSUBSYS_00011103andREV_04". Under each of these folders will be another folder with a long numerical name. Open each folder and look for the "DeviceDesc" which matches the hardware you are trying to install. Right Click on the "VEN_xxxx" for the device, then select "Permissions", and then tick "Allow" for "Full Control". Close Regedit and continue with the installation of your device.

Rob, Phill and T.

SCRATCHY AUDIO

Q I'm using Windows Media Player 9 for XP and a Leadtek DVD player for my DVDs. I can't get decent audio out of either of them as there's always some scratching sound. I have Hercules XPS 5.1 speakers, SB Live! 5.1 DE and a fast PC, an AMD XP2100+, 512MB DDR, GeForce4 Ti4400. I find that when the scratching starts it messes up my video, so could it be my DVD player? I've also downloaded a plug in for WMP 9: OSS/3D 6 for Widows Media Player 9 which helped a bit.

Jonathan Yeo



Wait... is that March Stepnik?

A **According to Microsoft, DVD playback using WMP9 is the bees-knees. Leadtek wouldn't confirm it for me but I suspect that the Leadtek Winfast DVD player is actually PowerDVD from Cyberlink (MPEG-2 player). Whether this is a codec-crippled version or not I don't know and they won't tell. My bundled versions of PowerDVD aren't obviously crippled but it would be easy enough to 'downgrade' the math involved in the codec (code-decode) algorithms – just a thought. If audio output seems scratchy or distorted the usual suspect is Direct Memory Access (DMA). To perhaps fix the distortion, enable DMA for the DVD player. When you enable DMA, data is transferred directly to and from memory without passing through the CPU. You could also try muting CD Audio: open Volume Control and then tick CD Audio to mute any playback. To open Volume Control, click Start, point to All Programs, point to Accessories, point to Entertainment, and then click Volume Control. If you get no sound from the DVD, turn it all back on! For information about how to enable DMA, find article 258757 in the Microsoft Knowledge Base: How to Enable Direct Memory Access (DMA).**

BASIC OR PLATINUM?

Q I own a set of Yamaha TSS-1 speakers and will soon buy a new PC. I am looking at an Audigy 2 soundcard. Does the basic card have a digital output that will connect to the TSS-1? Is there a difference in sound quality between the basic Audigy and the Platinum model?

Nathan

A **Let's reprise: Speaker Modes: 5.1 channel full scale, 4.1 channel surround and stereo. Inputs: two digital inputs (optical and coaxial) and two analog inputs. Both Dolby Digital and DTS decoding capability. Also, the unit serves as a receiver in some respects since it can select from multiple inputs – optical and coaxial SPDIF as well as a four channel analog connections. The Audigy 2 offers 6.1-channel audio, true 24-bit/96KHz audio and DVD-audio support and is a great match for your speakers. The Creative SB Audigy 2 Platinum Sound Card should be around $400 when you read this (Nathan got to read this a little earlier). The Creative SB Audigy 2 Sound Card (Box) will be around $250. The Platinum model features an external I/O box which will connect to just about anything you can think of including an electric guitar and pre-amp effects box! Between the cables in the Platinum box and your supplied speaker cables, you can hook these babies up just about any way you like.**





RESTART QUICKIE

Q Just a quick question, is a shutdown and bootup some time (hours) later, in regards to new installation, as good as a restart?

Ben

A **Absolutely. I wish more questions were like this.**

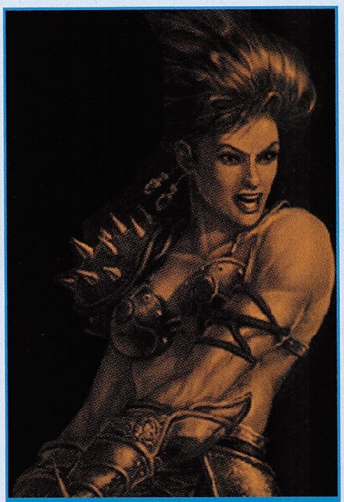
NEVERWINTER NEVER RUNS

I am having trouble playing Neverwinter Nights after I upgraded my PC. Originally, I had an Athlon 900MHz with Win98SE and Neverwinter Nights ran fine. I upgraded to an Athlon XP2000+, Ti4200, A7V333, 512MB DDR RAM and WinXP Home SP1. I have installed the latest drivers for graphics, sound, BIOS, CPU mini-port 533 and modem. When I first ran on my upgraded PC, Neverwinter Nights installed but would crash and restart the PC. I uninstalled the program and tried to reinstall but got the same problem. I loaded updates using auto-update but this didn't make a difference. Now it will not even install and crashes the program which causes a restart during the installation process. I have Norton's Utilities, but it tells me nothing is wrong when I run WinDoctor. Help!?

My PC now has the following specs: WinXP SP1 (all critical updated and driver updates loaded); Athlon XP2000+; Ti4200; A7V333 with latest BIOS; SB Live; Swansmart II Modem.

Michael

The only things you haven't mentioned are Chipset Drivers for the motherboard and DirectX. You will need a minimum DirectX version to run NWN. You should also, if possible, disable Antivirus programs, any daemons (mail clients) and Norton Utilities background processes. XP SP1 as well as some 'critical' updates is known to interfere with many games.



She gives ME the runs...

SWAPPING CARDS

Q I have an ASUS A7V-133C, Duron 850MHz, 256MB PC133 SDRAM, GeForce4 MX, Win2Kpro SP2, CD-RW, CDROM, Maxtor 6l040J2 partitioned into three drives and I use 41.09 Detonators. I recently upgraded my video card to a GeForce4 and was thinking of putting in my old ASUS TNT2 V3800 PCI card and running two monitors using nView technology, so I can have one desktop on one monitor and one on the other. Another reason for having two video cards is because the ASUS TNT2 is a video-out and video-in capture card. However, I would like both cards to be in because I want to do more ripping from VHS to VCD without having to swap cards.

Spoonman WA

A **Although it's not required, this setup will work best if both video cards are the same make. Install the second card according to the manufacturer's directions. When you turn your PC back on, Windows should automatically detect your new hardware. Follow the directions for installing the drivers for your monitor if your PC asks you to. You may need to insert the installation CD or disk for your second monitor to find the correct drivers, but most monitors work with generic Windows Plug and Play drivers, so you shouldn't need to install anything extra. (If your monitor didn't come with a manual, you can search for drivers online.) If Windows doesn't detect your monitor, you have to tell the OS where it is by using the Add New Hardware wizard in the Control Panel. If your**

monitor comes with special software or utilities, install them after you've installed the drivers. When you install a second monitor, you must designate the primary graphics card and monitor. To do this in Win98 and later versions, right-click the desktop, click Properties, and choose the Settings tab. Choose which display adaptor you want to use as your primary adaptor and check the box that says "Extend my Windows desktop onto this monitor." You can then move your mouse freely between the two monitors or open documents on each. If you want to return to just one monitor, just uncheck the box that extends your desktop.258757 in the Microsoft Knowledge Base: How to Enable Direct Memory Access (DMA).

MEMORY PERFORMANCE

I am in the process of buying a new desktop machine and it's proving to be harder than I thought about what memory to buy. I have settled on getting the ASUS P4G8X Deluxe board. The P4-2.4GHz, 533MHz FSB CPU is the most cost effective solution for my budget (especially since the motherboard is going to set me back more than $450!!!!). Obviously there is the issue of memory bandwidth versus the CPU FSB (I read "The Elephant Race" by Asher Moses, PCPP#81). I hear conflicting stories on whether there will be any performance advantage in buying the latest and greatest DDR400 memory. To be honest, I am now quite confused as to what it all means!!! Could you explain how DDR333, DDR400, DDR PC2100, DDR PC3200 etc. relate to each other and what it actually means in terms of speed and data transfer rate, as well as how to compare them to the system speed to see if there will be any performance advantage?

Rob

Can I explain "DDR333, DDR400, PC2100, PC3200 etc"?! No. I've already done it in previous issues (yeah, rush out, get those back issues and subscribe!). Nah, I'll recap. DDR333 or DDR400, for example, is nothing more than DDR memory that's specified for a double pumped 166MHz or 200MHz clock speed.
We've all heard of PC1600 and PC2100 memory but what does it mean and what's the difference? It's very much like PC100/133 and since it's double data rate you might reasonably expect that DDR would be PC200 and PC266. In fact, the actual chips are sold as such but glue them onto a DIMM and suddenly they're phatter and phaster. Why? Sales people didn't want you to think that Rambus at 800MHz was four times as fast as PC200. So, they went with a number that reflects the module's bandwidth. Since DDR DIMMs are eight bytes wide, the designation becomes PC200 times 8 giving PC1600 and PC266 times 8 giving PC2100, easy, huh? Today there's PC3000 running at 370MHz and PC3200 at 400MHz speeds. For the most part, PC3000 memory comprises the same chips that have run the PC2100 memory we have all grown to love. The difference is in the yield of the chip and how far it will perform after it has been designed and produced. In real-world tests, there's little difference between Corsair XMS3000 and Crucial PC2700 on a 133MHz front side bus (FSB).

UNKNOWN RESULTS

Q I'm a first time questioner, long time buyer. I have 256MB PC2100 DDR RAM and would like to know if I can add my 128MB PC133 RAM from my old PC to my new one.

Ben

A **Yes, you can. At worst the RAM will catch fire and explode but if you're lucky the system will just melt and try not to boot. It may crash or freeze if it gets to the pre-GUI enumeration stage, it may even get to the desktop with help from all known and unknown Pagan Gods, but I doubt that. The BIOS clock is likely to set itself back to 2003 BC and shoot the PC133 stick out through the PSU like burnt toast on a bad Monday morning..**



But will it help my PC boot?



Memory, Elephants, Elephant race, memory... whew, tough crowd.

Due to "technical difficulties" the Theo-PCPP ad campaign will not run this month. By "Technical difficulties" we mean "the Art Director playing the Sims all freaking month and not getting her work done".



www.pcpowerplay.com.au
(Um... you can find out what the hell this all means if you come to our site)



FLASHBACK

Games and tech, fondly remembered with Anthony Fordham

BATTLE ISLE 2

Developer: Blue Byte
Genre: Turn-based Strategy
Graphics Mode: VGA, 256 colours, 320x240
Sound: 8 bit digital effects with FM-synthesis or MIDI music
True 3D: Yes, but only for non-interactive battle scenes
Operating System: DOS 5.0
Released: 1993

When I picked this up from the Games Wizards in Penrith back in 1993, my Year 10 buddies proclaimed that Battle Isle 2's plain wrapping and tiny grainy screenshots on the back of the box made the game look "boring and stupid."

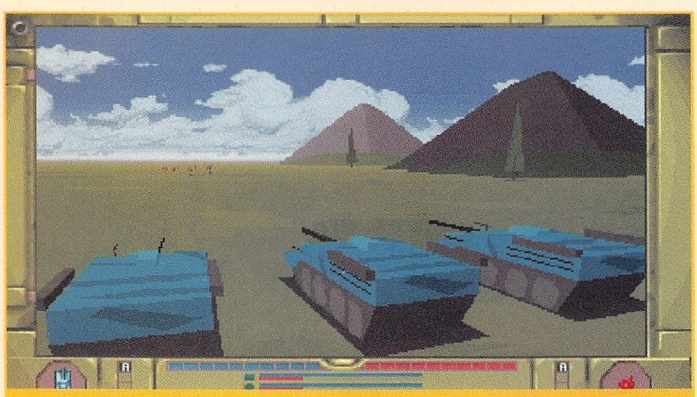
How wrong they were. My acquisition of Battle Isle 2 marked the beginning of a long love affair with German developers Blue Byte, spanning an expansion pack, a sequel, an expansion pack to the sequel, three different PCs to get the sequel running properly, and the demo of Incubation, a 3D squad-based strategy game that had nothing to do with the Battle Isle universe but pretended to anyway.

Awesome unit design

In Battle Isle 2 the hapless Drullian Empire laboured under the oppressive yoke of Titan-Net, an unspeakably evil supercomputer hell-bent on dominating the planet Chromos - a world almost but not quite like our own. Drullian military masterminds had failed to defeat this computer, and so they sent a ship to Earth to collect the biggest wargaming nerd of all time, who, thanks to a favourable review in *another magazine*, happened to be me. The top-down static view of Battle Isle split each battlefield into hexagonal regions called, aptly enough, hexes. Anyone who has ever played a serious table-top wargame - something with a name like Gettysburg's A Bridge To Far Across the Somme - would recognise this form of grid, which supposedly provides a more fluid gaming experience.

The game was resolutely turn-based and put me in control of blue Drullian forces against the nasty red machinery of Titan-Net. Each side had exactly the same set of hardware, but it didn't matter because each unit was impeccably designed.

The real meat of the army was made up of the doughty Technotrax, a light tank with a decent move radius and respectable firepower. The Technotrax's primary task was to provide backup and protection for the Ranger, an armoured trike that was the only vehicle with the ability to capture buildings. Capturing buildings was key to victory, as owning villages and cities generated resources to build more units. Indeed, some bunkers and villages were conveniently chock-full of weaponry and other hardware which would be awarded to the first player to capture the structure. Many a flimsy force of Rangers and Buggies was bolstered by a bunker full of Technotraxes, and cities could contain anything from



The 3D sections were non-interactive, but still cool



Ah those Germans, no one made strategy games like they did!

FLASHBACK TECH

486SX PROCESSOR

Manufacturer: Intel
Significance: First example of 'crippleware' as it's a cut-down 486DX. Plus allowed gamers to run Doom in High Detail mode
Cost: About $3000 for a 486SX-based PC with 4MB RAM and a 1x CD-ROM
Released: 1989

At first, the only reason I decided on the 486SX as our debut Tech Flashback was that it formed the core of the first PC I could truly call my own, instead of being on some kind of holiday loan from a University or High School. However, as I researched the history of this Little Chip That Could, I discovered that the humble 486SX was a significant milestone in the evolution of PC technology, and of particular import to gamers.



Before the double-clocking shenanigans of the early nineties there were two types of 486 - the DX and SX. The 486 was a 32bit processor, but had a pin that allowed the external bus to be set to 16bit to support older motherboards. While the DX could select 16 or 32bit, the SX was usually hard-wired to 16bit external, so the new benefits of 32bit processing were limited to the inside of the chip, and this cheaper CPU was likewise matched to cheaper, older motherboards.

Can you remember the Math Co-Processor? In the late eighties this was the equivalent of a 3D-accelerator, as it promised dramatically improved gaming performance on 386 systems, and was especially in vogue after Wing Commander arrived in 1990. Most 386 PCs were shipped without a Math Co-Processor, but one could be bought at fabulous cost and stuck on the motherboard, a really fiddly operation for ultimately not much extra yield. Enter the 486. Its immediate revolution, beyond 32bit processing, was its Floating Point Unit (FPU), that allowed for faster math operations, now an innovation de rigueur on all modern CPUs.

That was the 486. The 486SX came about because while in

3D BATTLES!

Battle Isle 2 did indeed have a 3D engine, used to resolve the hundreds of battles on each map. While the main battle map was a figurative representation of each unit, showing only one tank when the squad had 10, the 3D engine set out each tank on a battlefield and then blew them to bits as bombers passed overhead or railguns fired from over the horizon. It wasn't interactive, but it was pretty. Still, after the sixteenth identical battle, I was glad that Blue Byte had thoughtfully included an option to switch it off.



Each unit had a rendered, animated portrait



Titan-Net made fun of my facial hair!

heavy battle tanks to entire aircraft carriers, in turn chock-full of long-range jets and bombers.

Lots of toys

The variety of hardware was startling - everything from submarines to hovercraft, railguns (in this case, a great big gun on the back of a train) and repair vehicles, there was even a spy satellite that revealed the whole map. Military units had to be supported by fuel and ammo trucks, and changeable weather conditions could leave entire armoured battalions stranded in a wasteland of thick mud. Moving units across ice-bridges was also risky, as unseasonably clement weather could melt the slippery stuff and send your entire force plunging into a raging cataract.

The only real problem with Battle Isle 2 was the enemy AI. It was smart, damn smart, but it would conduct each and every move in what seemed like real time for a fairly dull human who liked to really, really think things through. On some of the later missions, when there were more than 300 units in the field, the computer's move could take the best part of two hours. I'm not kidding - I used to go and watch videos between moves. It was an all-day prospect, and this was back in the days of Windows 3.1 and DOS Protected Mode, so I couldn't Alt-Tab to read my email, which I wasn't getting anyway since nobody was connected to the Internet back then, or at least anybody I knew.

Battle Isle 2 was a superb piece of design, and nicely programmed given the limitations of the day. I ran it on a 486SX running at 25MHz and the 3D portion of the game (see boxout) was slick and fluid. Heaps of units, lots of strategy, it was a meaty chunk of a game that was anything but "boring and stupid". The only thing that outdid it was the sequel.

WHY BATTLE ISLE 2 SHOULD BE REMEMBERED

- massive variety of units each with a specific function that could totally change the flavour of the battle
- slick interface and control methodology that made navigating a complex game a complete breeze
- cute 3D battle resolution that created just that little bit of extra immersion
- nutty German flavour

486 VARIANTS

While not as multi-headed as the beast that was Pentium 2, Pentium 3 and Pentium 4, there were still a number of 486 variants. Showing here:

- 486SX - A 486DX with a faulty and laser-disabled Floating Point Unit. Usually ran at 25MHz
- 486DX - A 486 with a working FPU, usually running at 33MHz
- 486DX-2 - Ran at twice the external clock rate, so was marketed as a 66MHz CPU
- 486SX-2 - Likewise marketed as a 50MHz CPU
- 486SL - A DX that included power conservation circuitry for great, brick-sized 'laptops'
- 487 - A DX with a different pin layout so it could be installed as an upgrade to SX systems
- OverDrive - slightly dodgy upgrade option for SX systems that promised DX-2 performance but inside an SX-configured system, rarely delivered. Believe me, I spent all my pocket money on the damn thing.

manufacturing, some 486s would come out of the process with a faulty FPU. Rather than throw these chips away, Intel took a common or garden industrial laser, destroyed the FPU's power and bus connections and repackaged the burnt and blistered mess as an SX. The final result was a cheaper CPU that had many of the benefits of a DX, without the faster math.

At the time the specialist press trumpeted this as 'crippleware' - the deliberate hamstringing of a product so end users would not get any 'bonus' performance from an intermittently operating FPU. Intel's position was that users had paid less, and should therefore expect less performance. Users responded saying they hated the idea of being forced to live with damaged goods. Intel came back saying that users got what they paid for. And so it went.

Raw speed!

The 486SX was initially released at a staggering 25MHz. Actually, this wasn't staggering at all because the 386SX already ran at this clock speed. However, 32bit processing combined with a new set of specialised instructions - similar in concept to the Pentium's MMX extensions - gave roughly twice the power for the same clock speed.

The 486 family also had the first on-die cache memory. On-die cache has lost significance over the past eighteen months, but in the boom years of the Pentium 2 and 3 it was listed above actual system RAM on most PC spec sheets. All those storms of controversy about how much cache a Celeron had versus AMD's Duron, all that marketing guff about L1 and L2, just remember it all began with the humble 486.

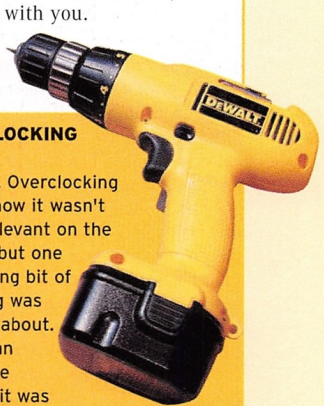
Speaking of system RAM, my mates' 386SX and DX machines generally shipped with 2MB of RAM, while my Osborne 486SX-25 shipped with a much meatier 4MB. This let me hear all the speech in Dune 2 and combined with the chunky 486 allowed me to play Doom in High Detail mode, although by the time Doom was released in 1993 the cool guy with the dad who did IT work for a regional university had a 486DX-2 66MHz machine that ran Wing Commander at blistering speed. Plus, he had a MIDI wave-table device, so the music sounded much cooler on his machine too.

The 486SX's real significance was that it was the first affordable CPU to allow real 3D gaming, beyond the sprite-based tomfoolery of Wing Commander and the dry nerdy polygons of the early flight sims. It was Doom's first true CPU (although the seminal FPS actually performed better on a DX) and it marked a boundary where PCs began to ship with a decent amount of system RAM.

Frontier CPU

Before the 486SX, the PC was very much a command-line dominated platform. Escape from CD\ and DIR /S /P was only possible through arcane file management systems like Xtree Gold or, (shudder) Windows 3.0. After the 486, systems were configured to boot straight to Windows 3.1, and leetness was defined by your ability to tweak your config.sys and autoexec.bat to get the most Extended Memory to dispel that evil "Limited Music Will Play" message when starting up Wing Commander 2. Ah EMM386.EXE, what fond times we had. How I tore my hair and rebooted my machine a thousand times an afternoon. Where are those days now? Lost! Lost!

Ahem. So, that's the 486SX, my first serious gaming CPU and the boundary of a bold new age of PC technology. We salute you, 486SX, and the weird caddy-based 1X CD-ROMs you brought with you.



OVERCLOCKING

Yes well. Overclocking as we know it wasn't really relevant on the 486SX, but one interesting bit of tweaking was bandied about. A German magazine claimed it was possible to drill a small hold in the CPU and break a circuit Intel had designed to disable the FPU. Free power! This was similar in concept to Trepanning, where drilling holes in a patient's head was supposed to cure mental illness. On the 486SX too, actually going through with this lunacy had similar results, namely death.

THE DISC

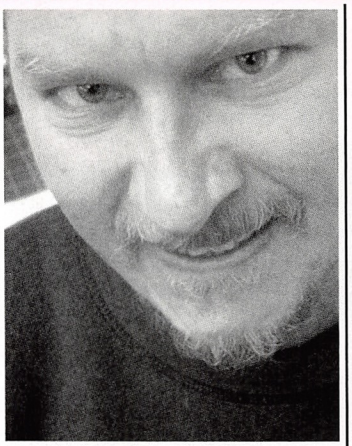


REQUESTS

We welcome requests so please forward your requests to Disc Producer Paul Noone via email at cdgod@next.com.au or write to PCPP DVD Requests, 78 Renwick St, Redfern NSW 2016

DVD OR CDS NOT WORKING?

PC PowerPlay can only replace discs that are faulty at the time of purchase, not after the fact. Replacement discs cannot be purchased, so please take good care of them. If your disc is damaged or doesn't function as intended then please contact Paul Noone immediately by phone or email - Phone: Sydney 02 9699 0333 Email: cdgod@next.com.au



I hardly even know where to begin this month. We've got so much stuff here that it's not funny. Let's just start at the top and work our way down shall we?

To begin, check out Spotlight for your very own copy of Grand Theft Auto. Oh, did I mention it was free? Yes, that's right. Those lunatics over at Rockstar have released this classic for all! And when you're done there, keep scrolling down for more video Viagra with the DOA Venus swimsuit clip. You'll also find the next episodes for Anachronox and Animatrix, as well as a host of other fine clips.

The Demos section has just exploded on page 86 with twenty (count 'em!) spanking new demos. The new Splinter Cell and Raven Shield demos are there, plus the eagerly awaited Freelancer, Praetorians multiplayer and more.

And Mods Plus is very special in this issue, once again bringing back the favoured themes of old. This month's feature game is Max Payne and we've got 500MB of mods and levels for you, including the new Kung Fu mod, third edition. Action Quake 2 stand-alone is also in the list, as is UT2K3 Excessive Overkill.

Of course, the Old Man has also compiled more maps than a Gregory's for you and Utilities has some really nice additions - not least of which is 3DMark03 and the world's handiest freeware utility: Zip Repair. Hint hint. Enjoy!

Paul Noone
Disc Master
cdgod@next.com.au

FREE GAME! GRAND THEFT AUTO

Treat yourself to a bit of naughtiness!

Rockstar Games has come up with the great idea to add Grand Theft Auto to their Classics list. Not only that, but now it has also been released as a freeware download! Some people have complained that some of the free games we give away are pointless because they have trouble working under the latest operating systems. You may have a point there, which is why this game has been modified from its original version to enable support for modern PCs and current Windows platforms. However, we unfortunately cannot guarantee that GTA will work correctly on your PC. Installation and execution of this software is entirely AT YOUR OWN RISK. Y'all have fun now, ya hear!

Requires:
Pentium 200
32MB RAM
8MB Videocard
450MB HDD





FREELANCER

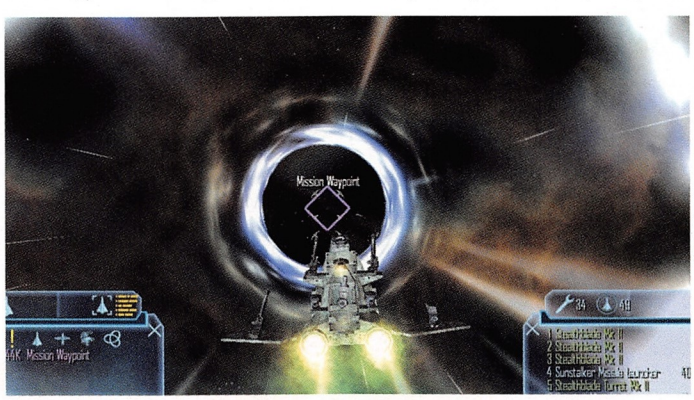
Not the revolution, but still damn tasty

Play missions randomly or follow the storyline. The universe is open for exploration, and the game evolves from the decisions you make. Demolish pirate bases or supply depots and watch the political fallout. Support your local cop, or not. The choice is yours but the universe won't wait for you. Your choice in missions, your successes, your failures all constantly affect your reputation. Play as a Naval Officer and everyone associated with the Navy will treat you better. Become a pirate and hunt down cargo vessels and you'll soon have friends in low places.

And missions you're offered and the technology you have access to all depend on who you become. Chase the almighty dollar, disrupt the corrupt government, enforce the law, chase human prey - every game is different.

Want access to easy money? Become a Lane Hacker: take down cargo ships and sell the goods on the black market. Feeling noble? Join the Liberty Navy and help make the universe a safer place. The choice is yours.

This demo lets you explore the entire Liberty System, with access to over a dozen bases and five flyable ships.

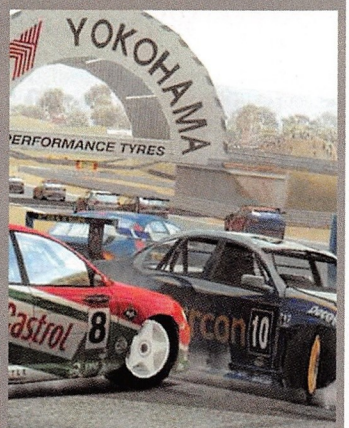


Requires:
P3-600
128MB RAM
32MB Videocard
300MB HDD

V8 SUPERCARS

Look out Skaife - you're next!

Called Pro Race Driver in USA and Spain, TOCA Race Driver in the UK and France, and V8 Supercars Australia: Race Driver here, the latest game in the TOCA series features realistic car mechanics with accurate handling and collisions, as well as customisable car set-ups. Race real cars and circuits from around the world, with authentic sound recording used for all the cars. This Australian demo allows you to race at Adelaide in a Ford Falcon or take a test drive at Brands Hatch in a Proton Satria.









Requires:
P3-700
128MB RAM
32MB Videocard
200MB HDD

RAVEN SHIELD

Now you can play with yourself



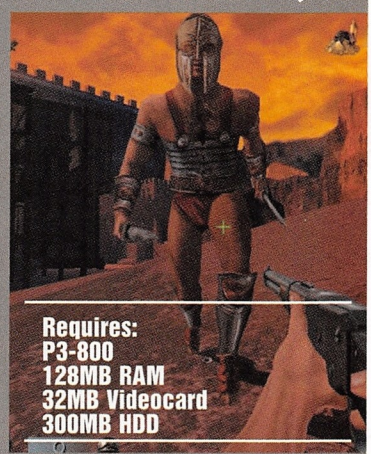
Command an elite, multinational squad of special operatives against a hidden terrorist foe. In Raven Shield, the third instalment to the wildly popular RAINBOW Six series, RAINBOW races against time to stop terror and unravel a mystery. Set in locations around the world, from London to the Caribbean to Rio de Janeiro, lead team RAINBOW in a desperate effort to battle a madman and foil his doomsday plot. This single player demo features the Oil Refinery mission, playable in all four custom mission modes with three levels of difficulty each. The demo also features 16 weapons from the full game.

Requires:
P3-600
128MB RAM
32MB Videocard
500MB HDD

DVD ONLY! WILL ROCK

Serious Sam rides again?

Developed by Saber Interactive, the visually stunning Will Rock takes gamers on a fantastic journey back to Ancient Greece to face mythological enemies. Will Rock's proprietary next-gen 3D engine and unique weaponry allow for innovative gameplay including melting, inflating and shattering both enemies and the environment. The game is scheduled to ship to retail shelves in June 2003. Will Rock's story focuses on Willford Rockwell (aka Will Rock), an unlikely hero whose body is inhabited by the spirit of a defiant Titan. Launched into a fantastic adventure through time, Will arrives in Ancient Greece where he must battle some of mythology's most powerful foes. Come get some!



Requires:
P3-800
128MB RAM
32MB Videocard
300MB HDD

RESTAURANT EMPIRE

Does this look like spit to you?

Starting with nothing except some cash and a passion for food, build a restaurant from the bottom up - hire waiters, decorate, even cook the meals! Buy, build, outsell and underprice your competition. Will you use your culinary wizardry to out-cook chefs? What tactics and strategies will you employ to buy out the competition? You decide. With a combination of business strategy and role-playing game styles plus a free-form sandbox game mode, three huge cities, over 30 playable chefs and a host of locations, Restaurant Empire is an epicurean delight of gastronomic proportions.



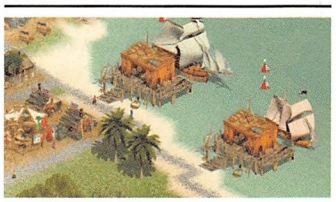
Requires:
P3-600
128MB RAM
32MB Videocard
300MB HDD

DVD ONLY! TROPICO 2: PIRATE COVE

My timbers have been shivering for months, mate

In this single re-playable scenario, you will cruise, raid, kidnap, and explore as you play over four years of game time. Tropico 2: Pirate Cove is the sequel to the award-winning fun-in-the-sun Carribbean simulation, Tropico. Keep your scurvy buccaneers satisfied with rowdy gambling, jolly feasting, and barrels of rum! World powers fear you, brigands respect you and captives obey your every command. And don't forget about the wenching! Argh, thar ain't nuttin' like bein' a Pirate King!

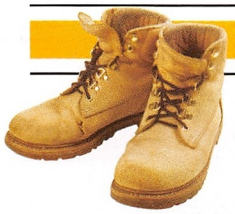
Requires:
P3-700
128MB RAM
16MB Videocard
250MB HDD





DISC VIRUS SCANNING

All files on CD PowerPlay and DVD PowerPlay are scanned with PC-Cillin 2003. For more information please visit: www.manac.com.au/VirusCheck



LAUNCH PARTY MASSACRE 2

Where careless talk costs lives

Long time boots aficionados will of course recall the famous launch party hosted by crack publishers Blind Drunk and the snooty all-girl PR team known as Sulk, which resulted in the fast train to the coast being ejected at high speed far out to sea. See, this was a largely typical result for a largely typical PC game launch party - that the cleverly conceived concept entertainment should turn bad and either inconvenience or seriously injure all those involved had in recent times become almost de rigueur. But there are other risks associated with launch parties, especially when rival media outlets are invited, the VB flows freely, and there are no pretty PR girls to keep the geeks' minds off violence and anarchy.

The problems of media rivalry are well documented in columns far more widely read than mine, but in the games industry we have a unique exacerbating factor, namely different gaming platforms and the zealous dedication each media provider - especially the official licensed titles - has to them. In the experience of the boots and myself, the worst are the Nintendo guys. Unlike the pure standard-issue geeks associated with PC and PS2, the Nintendo guys all have exciting piercings, serious tattoos and slab-like foreheads known and feared wherever street fighting men happen to gather.

The disposition of the average Nintendo journalist - although I use the term loosely - is not in any way improved by the unfortunate fact that the Gamecube, Nintendo's latest product, is not performing particularly well here in Australia. Gauche and tactless press colleagues such as my crazy ex-third flatmate or the fat PS2 editor known only as Meatloaf, will never fail to mention this to the Nintendo boys, at least six or seven times a day, whether by email or in person at one of the various press events which form the topic of this month's column.

The final factor which makes life complicated, and the average launch party a minefield of petty diplomacy - or lack of it, is that many games today are being launched simultaneously on all platforms. The PS2 version always gets the flashiest life-sized cardboard cut-outs of the chief protagonist, the PC version always gets the fattest press kits with the most completely unnecessary ancillary gameplay .avis on CD, the Xbox version gets the most free console giveaways in an attempt to shore up flagging interest in the platform and the Gamecube version is lucky to get a badly made fluffy toy. This puts the Nintendo guys initially in a bad mood, and six hours of increasingly drunken ribbing by all and sundry only makes the atmosphere even more fraught and heady with the scent of fear, frustration and of course BO.

So it was that on one Thursday evening in the pouring rain with PCPP three days late for deadline partly due to a promised Yager preview CD which had a full working copy of Motocross Racer 3 for Xbox on it instead, and partly due to me not having written this column, Australia's gaming press gathered in a dingy wine cellar in the Rocks. For once, the event was not hosted by our old friends Blind Drunk, but by a new distribution startup that had decided the name Distributor X had just enough retro charm to be marketable. They in turn had hired third-tier PR consultancy FlogIT to stuff the dingy wine cellar full of papier mache dinosaurs and creepy human figures made out of stockings filled with newspaper dressed in rangers outfits. See, with the recent announcement of Bluetongue's Jurrasic Park-licensed dinosaur park builder, developers Scabrous had jumped on what they saw as the Next Big Thing bandwagon and we were all here tonight to witness the launch of DinoPark 3D. That the game completely described itself in just two words and made all further news, preview or 2003 Roundup coverage unnecessary was a source of relief to us on the PCPP contingent at least, since it quickly became apparent that this game could only ever aspire to being a complete pile of cack.

The Nintendo guy on the other hand, who for the sake of that old milk of human kindness I shall identify only as L-, was absolutely freaked out of his heavily tattooed brain with excitement. This, he determined, was going to be even bigger than Super Monkey Ball 2 or the new version of the Gameboy Advance that already had the frontlight built in so you didn't have to crack open your $200 console and attack it with a soldering iron.

Exactly what it was that Meatloaf said when he leant over and whispered in L-'s ear causing him to grab the nearest papier mache dinosaur and bust it into a dozen pieces on the tip of Meatloaf's heavily jowled jaw, I have never been able to discover. Never one to miss a trick, my crazy ex-third flatmate who was there on some flimsy pretext that he was still a gaming journalist despite being blacklisted by PCPP's editor after the Warcraft 3 Playguide incident, climbed up onto one of the trestle tables and launched himself into what had not actually been a fray, but what suddenly turned into a fray when my crazy ex-third flatmate hauled on L-'s Mario Sunshine T-Shirt, tearing it right down the middle.

Someone from FlogIT attempted to break apart the combatants, but was sucked into the violence like a soggy used condom getting sucked into a sewer's main intake valve. Bits of The Cake Shop sponge and chocolate mud cake were ejected from the centre of the maelstrom, and the sound of the trestle table collapsing and scattering polystyrene cups and a generous amounts of VB onto the designer jeans of the Official Xbox Magazine staff marked the point of critical mass for the fight, and within seconds everyone was wading in except myself, the boots, and PCPP's new Deputy Editor since it was still only her first week.

We stood on the edge of the room regarding the brawl. The Deputy Editor was making pantomime punching and kicking motions as if eager to get on in there, while I sipped from a hip flask I always brought when I heard VB was going to be the only alcohol on offer. The warm Frangelico coating my throat was like a familiar friend in a world gone weird with violence. Needless to say, the sudden activity was not helping the BO situation any.

I left them all to it. Outside on the rainy street I found PCPP's art director, her habitual cigarette like a defiant gesture against the impersonal immensity of the city.

'Am I missing anything?' she asked.

'Just a fight,' I replied. Her eyes blazed and tossing the cigarette through the window of a passing cab she rushed downstairs into the darkness of the wine cellar. A few moments later I heard a scream that sounded awfully like the art director of a certain console magazine.

As I walked home through streets slick with rain, passing a cab that had impacted a telegraph pole at high speed while the driver had been furiously attempting to put out a lit cigarette butt that had landed inexplicably on his crotch, I reflected that life was good. By, which I mean life was insane. Or something. In any case, a quick dose of Counter-Strike would soon set me right.

PCPP#87 on sale
7th May 2003

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